

New Jersey Clean Energy Collaborative 2003 Program Plan

November 1, 2002

New Jersey Clean Energy Collaborative 2003 Program Plan

Table of Contents

Background	2
Board Staff Meetings	3
Summary of Proposed Program Changes.....	4
General Issues	4
Residential Electric HVAC	4
Residential Energy Star Products.....	5
Residential Low-Income	5
Energy Star Homes.....	6
Residential Retrofit	7
Commercial and Industrial Programs.....	7
Customer-Sited Clean Energy Generation Program	8
Budget Development.....	9
Funding Options.....	10
1. Manage Program Costs to Budget.....	10
2. Temporarily Shift Funds Among Program Areas	10
3. Establish and Utilize 2004 Funding	11
Open and Pending Issues.....	11
Budget Flexibility.....	11
Program Evaluation.....	12
Performance Incentives	12
Program Descriptions.....	13
Program Budgets.....	14
Performance Incentives	16
Transition from Existing Plan to Next Plan	16
Conclusion and Summary of Board Actions Requested	16
Attachments.....	17
1. 2003 New Jersey Clean Energy Collaborative Program Descriptions.....	17
2. 2003 New Jersey Clean Energy Collaborative Program Budgets.....	17
3. 2003 New Jersey Clean Energy Collaborative Performance Incentives.....	17

New Jersey Clean Energy Collaborative 2003 Program Plan

Background

On March 9, 2001, the Board issued a Final Decision & Order¹ (“Final Order”), which adopted with some modifications the programs that were filed with the Board on February 8, 2000. In the Final Order, the Board also established the annual, per-utility funding requirements for the energy efficiency and renewable energy programs for 2001 through 2003. The funding level for 2004 is to be set by the Board in a separate proceeding prior to the implementation of the 2004 energy efficiency and renewable energy programs. Table 1 shows the Board mandated funding requirements by utility for 2001 through 2003 (Final Order at page 75).

Table 1				
	Required Funding (\$ millions)			
Utility	2001	2002	2003	Total
PSE&G-Electric	43.045	43.285	43.385	129.715
PSE&G-Gas	20.773	21.989	21.889	64.651
JCP&L	32.338	32.839	34.939	100.116
Conectiv	8.138	9.835	11.435	29.408
NUI-Elizabethtown	3.962	4.017	4.217	12.196
South Jersey Gas	2.247	2.810	3.510	8.567
New Jersey Natural	3.962	4.017	4.217	12.196
RECO	0.534	0.534	0.534	1.602
Total	115.000	119.326	124.126	358.452

As required in the Final Order, the utilities made a compliance filing on April 9, 2001, which included updated program descriptions incorporating the changes ordered by the Board in the Final Order, as well as detailed program budgets for the energy efficiency and renewable energy programs. The Board approved the compliance filing on August 15, 2001.

On November 1, 2001, the utilities filed updated program plans and the detailed program budgets for 2002. Through 2002 the utilities have continued operating the energy efficiency and renewable energy programs approved by the Board on August 15, 2001 with the 2002 Budgets as filed on November 1, 2001.

On May 31, 2002, the utilities filed the 2001 Annual Report and the First Quarter Report for 2002. The First Quarter Report for 2002 described through March 2002 program progress and expenditures compared to the 2002 Budget as filed November 1, 2001.

¹ *In the Matter of the Petition of the Filings of the Comprehensive Resource Analysis of Energy Programs Pursuant to Section 12 of the Electric Discount and Energy Competition Act of 1999*, BPU Docket Nos.: EX99050347, EO99050348, EO99050349, EO99050350, EO99050351, GO99050352, GO99050353, GO99050354.

On May 6, 2002, the utilities, in conjunction with the Natural Resources Defense Council (“NRDC”)², filed a request with the Board to modify the customer sited renewable energy program that was filed on November 1, 2001. A Board Order, dated August 16, 2002, approved those modifications.

On August 30, 2002, the utilities filed the Second Quarter 2002 report describing program progress and expenditures through June 2002 compared to the 2002 Budget as filed November 1, 2001.

In August 2002, Board Staff initiated open meetings with interested parties to solicit input regarding program modifications to be considered by the utilities in the filing for 2003 program plans and budgets, which was due on October 1, 2002. However, due to the numerous meetings Board Staff held to solicit input for consideration in that filing, by letter dated September 23, 2002 the utilities requested that the Board change the filing date from October 1, 2002 to November 1, 2002. The Board approved that request by letter dated October 3, 2002.

Board Staff Meetings

Board Staff held a series of meetings with interested persons over the past few months to solicit input regarding proposed changes to the current Comprehensive Resource Analysis (“CRA”) programs and budgets. The meetings were organized into groups that would address four program areas: 1) residential; 2) commercial and industrial; 3) renewable energy; and 4) schools.

Participants provided significant input covering a wide range of ideas for new programs, changes to existing programs and shifting of budgets. The Collaborative noted early on in the process that current projections indicate that the existing lineup of programs would use up almost all of the funding available for 2003, including both the Board ordered funding for 2003 plus the actual carryover from 2001 and forecasted carryover from 2002.

Participants in Board Staff’s meetings suggested a number of new program initiatives and proposed changes to the existing programs. However, the funding available for 2003 programs falls far short of the amount that would be required to implement all of the new programs and all of the program changes suggested by participants in Board Staff’s meetings. Therefore, subsequent to the conclusion of the meetings, representatives of the Collaborative met with Board Staff to discuss all of the proposed changes and obtain guidance from Staff regarding which changes they believed best met the objectives of the Board.

Based on those discussions with Board Staff, and on input from the participants in Board Staff’s meetings, the Collaborative is proposing a significant number of changes to the programs and budgets to address the issues raised. The changes proposed by Staff have resulted in a reduced budget for certain programs. Details of program changes are included in the program descriptions included herein. The following section provides a summary of the major proposed changes to programs and budgets.

² The New Jersey Clean Energy Collaborative (“Collaborative”) consists of the seven electric and gas distribution utilities and the NRDC.

Summary of Proposed Program Changes

General Issues

Board Staff has indicated that the Board is considering the creation of an independent advisory or planning group that would perform a review of the programs and provide recommendations to the Board concerning potential changes to programs and budgets. Board Staff requested that the Collaborative consider which of the current Board-approved programs could be slowed down or suspended, without doing long-term harm to the programs, while the Board considers the creation of an advisory or planning group and performs a review of the programs. Based on this guidance, the Collaborative has identified a number of programs that could be slowed down or stopped without incurring long-term damage to the program.

Specifically, as discussed in more detail below, the Collaborative proposes that the Residential Retrofit and Schools EE&R Education programs be shut down and that the Building Operation and Maintenance program be suspended to new participants. All of these changes are subject to Board approval. For the Residential Energy Star Products program, the Collaborative proposes to honor existing agreements with retailers already signed into the program, and to suspend the solicitation of new retailers into the program. The Collaborative welcomes the opportunity to discuss the merits of including these programs in any package of programs approved by the Board in the future.

For the Residential Electric HVAC program, the Collaborative proposes reducing the financial incentives to customers. For the Energy Star Homes program the Collaborative is proposing a study to determine if incentive levels can be reduced at this time. Slowing down or stopping any of the other programs would result in long-term damage to the programs and disrupt positive momentum that has been established. The budget reductions resulting from the program changes identified above reduced the proposed 2003 budget for energy efficiency to \$102.1 million which is approximately \$13 million below the funding available. See Tables 3 and 4.

While the Collaborative has identified the programs that are likely to be least harmed by a slow-down or suspension, it is nonetheless clear that these programs have merit and warrant further Board consideration. These CRA programs are designed in part to create market conditions that can support effective implementation of increased efficiency standards. While the Board could adopt new regulations to replace existing programs, it is not feasible to make this shift overnight. In the absence of the market transformation efforts these current programs are undertaking, achieving full compliance with any such new efficiency standards would be unlikely, and the result would be that the State of New Jersey would not achieve the same level of energy savings the current programs are designed to deliver.

Residential Electric HVAC

The Residential Electric HVAC program is widely recognized as one of the more successful programs in the country and is being imitated in several states. Given the success and maturity of the Residential Electric HVAC Program the Collaborative believes that the incentives, which are primarily direct payments to customers for the installation of high efficiency cooling equipment, can be reduced at this time. The Collaborative also proposes to require program participants to do more for less by implementing a pilot that would require installers to properly

seal ductwork. This pilot would be in addition to the existing requirements that systems be properly sized and charged. In short, the success of this program has created the opportunity to begin reducing incentives and to achieve additional savings at a lower cost.

Residential Energy Star Products

The Energy Star Products program includes consumer education and sales, marketing, and training efforts aimed at different market participants including manufacturers, distributors, and retailers. This program supports the efforts of the federal Environmental Protection Agency (“EPA”) aimed at promoting Energy Star appliances, windows, and lights. This program included only limited direct incentives to customers. Many of the participants in the meetings held by Board Staff were not convinced of the merits of this program and argued the dollars would be better spent on direct incentives to customers.

Based on the Collaborative’s analysis, this program provides substantial, cost-effective, long-term benefits to New Jersey customers. Current research shows that there is significantly higher awareness and market share of Energy Star products in states with comparable programs than in states without such programs. The program supports various federal Department of Energy (“DOE”), EPA, and regional efforts aimed at promoting energy efficient appliances, windows and lighting. Therefore, this program should be continued in 2003.

However, in response to the comments received from Board Staff and other parties, we propose two major changes to the program. First, we propose that the Board place the program in a maintenance mode pending further review. That is, the utilities would honor any previous commitments made but would not solicit new retailer participation in the program. The Collaborative will continue to work with Board Staff to develop long-term recommendations to the Board concerning the future of this program.

Second, a number of participants recommended a program or programs that would more directly impact a larger number of residential customers. They are seeking a program that would achieve a high level of visibility, create broad based awareness of CRA programs, and allow a large number of customers to participate. For example, one potential program that was discussed would allow all residential customers to purchase 2-4 compact fluorescent lights at little or no cost. Much discussion took place concerning the details of such a program but no consensus was reached. However, our proposal includes the reservation of sufficient funds to allow for a broad-based consumer effort as part of the Energy Star Products program and a commitment by the Collaborative to continue working with Board Staff and other participants to develop a proposal for such a program for consideration by the Board in the near future.

Residential Low-Income

This program provides for the installation of energy efficiency measures in the residences of low-income customers at no cost to the customer and includes an arrearage reduction component. One issue that was discussed at length during Board Staff’s meetings was a proposal for a new pilot program aimed at senior citizens in all electric homes in Monroe Township. Key issues discussed concerned the relative merits of creating a new pilot program versus expansion of the existing low-income program, whether all senior citizens in all electric homes should be eligible regardless of their income or alternatively if the program should include income limits, and

whether the program should be a pilot available to residents in Monroe Township only or a broader based program available to all eligible senior citizens in all electric homes.

Based on a review of these issues, it is simpler, more efficient and more timely to expand the existing low-income program than to develop a new program for this market segment. The Collaborative believes the program should include an income limit and is proposing that the existing cap of 150% of the federal poverty level be expanded to 300% of the federal poverty level for senior citizens in all electric homes. Finally, the Collaborative is proposing that the program be available on a pilot basis to certain seniors in order to test the viability of this program offering. All of these changes are included in the Collaborative's proposed low-income program.

Energy Star Homes

This program provides incentives to builders of homes that meet or exceed the Energy Star homes standards. In 2002, two of the State's largest builders agreed to build all new homes in the State to Energy Star standards. The key issues regarding this program that were raised concern whether the program has achieved market transformation and could be cut back or eliminated, whether the program is contributing to the construction of larger homes and/or contributing to urban sprawl, and whether the incentives could be modified to include larger incentives for builders that exceed program standards.

There is no evidence that this program contributes to the building of larger homes or urban sprawl. There are many economic and societal factors that contribute to urban and suburban development, and the same size homes would be built at the same locations with or without this program. The incentives are designed to cover a portion of the incremental costs incurred when builders change from standard building practices to more efficient building practices. Based on economic factors, it is likely that builders would return to standard building practices if this program were eliminated at this time. However, many of the suggested program changes have merit and the Collaborative proposes the following changes for 2003.

Builders have indicated that once their building practices are modified they would not change back to their old building practices. Therefore, the time is right to perform an analysis that will allow for an informed decision concerning changing incentive levels and/or increasing program requirements (i.e., requiring a higher level of efficiency without providing additional incentives).

The Collaborative is in the process of evaluating appropriate incentive levels. Our evaluation will include an assessment of the extent to which incentives can be reduced at this time, the feasibility of providing higher incentives for better performing buildings using a tiered incentive approach, and whether additional incentives should be provided for the building of homes that do not contribute to sprawl. It is anticipated that this analysis will be completed by March 1, 2003. Therefore, we recommend that the existing incentives remain in place pending the completion of this analysis. To do otherwise could result in the loss of the positive momentum this program has achieved in a short period of time and builders reverting to standard building practices.

To address the issue of whether the incentives contribute to the building of large homes, it is proposed that the core incentive be capped at \$3100 regardless of the size of the home.

Residential Retrofit

This program provides information to help customers assess the efficiency of their energy usage and opportunities for improving efficiency. The program also cross-promotes and increases participation in other efficiency and renewable programs.

Several participants in Board Staff's meetings recommended elimination of this program and redirecting the funding to programs with direct customer incentives. Others recommended expansion of this program to provide for direct incentives to customers to install recommended measures. While the Collaborative continues to believe this program has merit, it nonetheless proposes that this program be suspended until such time as the Board has had an opportunity to further review its merits. The transition plan for phasing out this program is described in the program write up. See Attachment 1.

Commercial and Industrial Programs

These programs employ a comprehensive set of offerings and strategies to address market barriers to efficient building design and construction. The C&I Construction program also provides incentives to designers and builders of schools.

Participants in Board Staff's meetings recommended a number of significant changes or additions to this program, including the creation of a pay for savings program, the creation of a program track aimed at small businesses and/or small businesses in economically depressed areas, the inclusion of incentives for commissioning and re-commissioning, and ways to make participation in the program easier and less burdensome. Many comments also concerned the schools track component of this program that will be discussed separately below. The Collaborative is proposing the following major changes to this program.

As noted below, the Building Operations and Maintenance program will be suspended pending further review by the Board as described in the program write up and the Compressed Air program will be rolled into the C&I Construction program.

In response to a recommendation made by the Ratepayer Advocate, the Collaborative proposes to establish a new program track that would provide for the direct installation of energy efficiency measures at no cost to small businesses located in Urban Enterprise Zones in the service territories of JCP&L and PSE&G. This market has had low participation in previous programs and this new program offers the benefit of both achieving energy savings and improving the competitiveness of small businesses in economically depressed areas of the State. The program would be bid out competitively to Energy Service Companies.

The Collaborative also proposes to add a new building commissioning track. Utilities will work with the New Jersey Department of Community Affairs to develop commissioning guidelines as required by the new building energy sub-code. In addition, the Collaborative will work with New Jersey colleges and universities to investigate potential re-commissioning pilot projects and to provide incentives for identified projects.

Given the State's significant investment in new school construction, Board Staff held meetings with interested persons focused on the schools track of the C&I program. In response to the suggestions made, we propose the following modifications.

A web page will be created to provide specific information related to school construction that will include links for researching additional information. For the Abbott school districts, a pilot effort will be initiated to provide Comprehensive Design Support services to both the New Jersey Economic Development Authority (EDA) and firms selected by EDA to design Abbott school projects in 2003, and enhanced incentives that could equal up to 100% of the incremental cost for certain energy efficiency measures.

Within 60 days of a Board order, a plan will be developed to provide assistance to K-12 schools, including both Abbott and non-Abbott schools, including completion of a study to assure that appropriate incentives are offered to design teams to encourage performance of the incremental work that is necessary to incorporate optimal energy efficiency considerations in designs. Utilities will have a single point of contact for schools and have agreed to work with industry players to make the application and approval process more timely and less burdensome.

In response to Staff's guidance, the Collaborative proposes to suspend the Building Operation and Maintenance program and to maintain offerings to current participants only. While these cutbacks will not substantially harm the program in the long term, closing off the program to new companies will short-circuit the promise of major savings opportunities for New Jersey customers. The Collaborative urges the Board to consider the need to close off the O&M program to new participants. Participants can save up to 20% on their energy costs, and a recent evaluation of a similar program in New England found that participants saved an average of \$20,000 per year per facility in reduced fuel, water and sewer bills. This program has the potential to become a self-sustaining, home grown and operated program serving New Jersey businesses and public institutions. The realization of this goal will be delayed with any suspension.

Customer-Sited Clean Energy Generation Program

A number of significant changes to this program were suggested in the meetings with interested persons chaired by Board Staff. Agreement was reached among most of the participants in these meetings regarding a number of the changes being proposed.

Many industry participants indicated that the current "block" structure for incentives made it difficult to do business planning because the blocks filled up so rapidly in 2002. To address this concern, our proposal eliminates the block structure and replaces it with annual incentive levels that would remain in place for the full calendar year or until all of the allocated funding for the year is committed.

Current incentives are the same for all technologies. This approach was intended to allow for competition amongst technologies and included caps to ensure no one technology received a disproportionate share of funding. Many comments, including those of Board Staff and the New Jersey Department of Environmental Protection ("NJDEP"), supported different incentive levels for different technologies. In response, the proposal modifies the incentives to provide for

different incentives for different technologies. The incentives were developed in part based upon an analysis performed by NJDEP assessing the relative environmental benefits of each technology and the financial incentive needed to make a specific technology financially viable.

The proposal increases incentive levels for small photovoltaic (“PV”) systems (under 10 kW), given that this market has developed slowly. The proposal maintains the current incentives for larger PV systems (other than increasing the first tier for the first 10 kW), but in recognition of the high level of success achieved in this segment during 2002, the incentives will be capped at 50% of the total installed cost, down from the current cap of 60%. Fuel cells with a renewable fuel source would be eligible for the same level of incentives as large PV systems. Wind and sustainable biomass would receive an incentive lower than both the current level and the level proposed for PVs and fuel cells with a renewable source of fuel.

Significant discussion took place concerning natural gas fuel cells. The issue of whether or not funding should continue for natural gas fuel cells was the most contentious issue discussed in the meetings. Some argued for discontinuing funding, others argued for continuing funding with renewable energy dollars, while yet others argued for continuing funding, but not with dollars set aside for renewable projects.

As stated above, current projections indicate that most of the funding for energy efficiency approved by the Board (plus carryover from previous years) will be utilized by the end of 2003. The Collaborative believes dollars spent on energy efficiency programs provide N.J. consumers with benefits that exceed the benefits they receive from subsidizing renewable energy projects. On that basis, the Collaborative does not support utilizing energy efficiency dollars to provide incentives for natural gas fuel cells.

Natural gas fuel cells provide significant environmental benefits and can provide a bridge to when truly renewable sources of hydrogen become available as a source of fuel. Our proposal is to continue to fund natural gas fuel cells as part of the Customer Sited Clean Energy Generation (“CSCG”) program. However, in light of the many issues raised regarding natural gas fuel cells, it is proposed that incentive levels be reduced from current levels to a level below incentives offered for PV systems and renewable fuel cells and that incentives be phased out over three years.

Budget Development

The utilities developed the proposed budgets utilizing a bottom up approach. This means the process begins by developing budgets for each program on a statewide basis and allocating costs to each utility based on expected participation levels in the program. This process can and has resulted in having sufficient dollars available on a statewide basis for all programs, while some individual utilities’ three-year program expenditures are forecast to exceed the three-year Board approved funding for energy efficiency, customer sited renewable energy or total funding levels through 2003 if they implement the proposed programs.

This can occur for a number of reasons, including participation in programs that is not proportional to a specific utility’s Board-approved CRA funding level. For example, a large number of new homes are being built in south and central New Jersey. This imposes a higher

cost for the new homes program on utilities that serve the areas where the new homes are being built than on those that do not. Also, incentives for one or two large renewable energy projects can exceed the approved budgets of some of the smaller utilities.

Funding Options

Utilities have several options at their disposal to address utility specific budget issues.

1. Manage Program Costs to Budget

The utilities have managed programs to keep within budget both on a statewide and individual utility basis. For example, this past summer the Board approved certain changes to the Customer-Sited Clean Energy Generation Program aimed at capping incentives for large projects. We have also proposed to reduce incentives for certain energy efficiency programs to keep within budgets. Utilities also control other costs such as sales and marketing to meet Board approved budgets and goals.

2. Temporarily Shift Funds Among Program Areas

The Board has made commitments to a number of renewable energy projects under the Board administered Grid Supply/Market Development program. However, the incentives approved by the Board will be paid out over several years. Therefore, while the dollars are committed to be paid out in the future, only a small portion of the Grid Supply budgets for 2001, 2002 and 2003 will actually be spent in those years. One option to balance utility budgets is to allow a utility that is forecasted to be overspent on energy efficiency or customer sited clean energy generation to temporarily shift unspent dollars from the Board-administered grid supply program to these programs. If dollars are transferred from a renewable budget to an efficiency budget, an equal amount would have to be transferred from energy efficiency to a renewable program in a future year to maintain the 25% renewable energy minimum required by EDECA³.

Transferring dollars from the grid supply program to the energy efficiency or customer sited clean energy generation programs has the benefit of utilizing funding now rather than having it sit idle for several years until the grid projects are built and the production credits are paid. The same arguments hold for the transfer of dollars from customer sited clean energy generation to energy efficiency.

However, the Board's March 9, 2001 CRA Order requires each utility to maintain a 75/25% energy efficiency/renewable energy split in each year. The Collaborative is requesting that the Board consider allowing utilities to shift unspent Board ordered renewable energy funding (both grid supply and customer sited) from 2001, 2002 and 2003 to energy efficiency programs in 2003 and either transfer an equal amount from energy efficiency to renewable energy in a future year in order to maintain the long-run 25% minimum required by EDECA (and the customer sited/grid supply percentages required by the Board) or enable other mechanisms that would meet this requirement. This proposal will in no way limit the funding available to customer-sited

³ EDECA does not require each utility to maintain the 75/25% split in each year. Rather, it requires only that a minimum of 25% of the statewide funding approved over the 8 years of the program be dedicated to renewable energy projects defined in the Act. Therefore, neither annual statewide budgets nor individual budgets must allocate 25% to renewable energy projects each year. See N.J.S.A. 48:3-60(a)(3).

renewable energy projects in 2003. Any customer-sited application that meets program requirements and does not exceed the Board approved funding levels will be honored.

3. Establish and Utilize 2004 Funding

In 2001, the Board approved individual utility CRA budgets for 2001, 2002 and 2003. As expenditures approached program budgets in 2002, individual utilities filed petitions with the Board requesting approval to exceed program budgets. Utilities proposed either shifting funding from programs that were under spent or utilizing a portion of the 2003 Board approved budgets.

Based on the 2003 budgets, as filed, certain utilities will exceed their three-year Board approved funding levels (for either energy efficiency or customer-sited clean energy generation or both) at some point in 2003. While the Board has not yet set funding levels for 2004, EDECA requires a minimum level of funding for each of the eight years and the Board, in its March 9, 2001 Order, determined that annual minimum to be \$107.5 million. Therefore, the utilities request that the Board approve the use of 2004 funding to cover the amount that the approved funding levels through 2003 are projected to be exceeded in order to fully fund the budgets as filed. Lack of authorization to do so could result in placing a utility in the position of having no authorization to continue spending or to make commitments for future payments under approved CRA programs.

The utilities encourage the Board to commence a proceeding to determine CRA funding levels for 2004 and beyond as soon as practicable and in sufficient time to accommodate a 2004 program plan filing in 2003 that can be acted upon and approved by the Board prior to January 2004.

Several programs such as Energy Star Homes, C&I Construction and Customer-Sited Clean Energy Generation generate commitments for incentives that may not be paid until as much as two years later, at the time the projects are completed. While the Board has not yet approved budgets beyond 2003, the utilities are requesting approval from the Board that any incentive commitments made in 2001, 2002 or 2003 pursuant to a Board-approved CRA program will be honored even though the incentive may not be paid until a future year and that the utilities will be authorized to recover such expenditures as an approved CRA expenditure.

Open and Pending Issues

Budget Flexibility

In October 2001, the utilities petitioned the Board requesting the flexibility necessary to modify incentive levels and program budgets in response to changed market conditions. Incentives and budgets are set based on market research that informs expected levels of participation based on the level of the incentive. Market conditions change, sometimes rapidly, and administrators need the ability to rapidly change incentive levels and budgets in response to changed market conditions. Also, factors such as weather can have a major impact on program participation. An extremely hot summer, for example, can result in a run up in air conditioner sales and incentive payments that lead to program budgets being exceeded in a very short time frame.

Budget flexibility is necessary to effectively manage these programs in today's rapidly changing energy markets. The Collaborative also recognizes the Board's need for oversight authority concerning the implementation of the CRA programs. The pending proposal for budget flexibility meets both of these objectives. Therefore, it is requested that the Board provide the utilities with the flexibility necessary to effectively manage these programs by approving the request for flexibility filed in October 2001.

Program Evaluation

The program budgets for 2003 include amounts for program evaluation in anticipation of the Board authorizing the utilities to resume program evaluation, which was suspended at the Board direction in mid 2002 to allow Board Staff to review the bids the utilities received to conduct this work.⁴

Program evaluation is vital to assessing how well each program is meeting its goals. Evaluation entails measuring and documenting performance indicators and documenting achievement of metrics. Evaluation also provides timely feedback to program managers, and is used to inform and improve program design and implementation. The Collaborative urges the Board to authorize resumption of this activity.

Performance Incentives

Financial incentives are generally accepted as an effective method for motivating program administrators to achieve stretch goals. The Board previously approved incentive payments to utilities in its 1991 DSM regulations and other states, including Vermont and California, include incentives for achieving program goals. They should be utilized for CRA programs as well.

The utilities originally requested performance incentives in the initial program filing in February 2000. The Board rejected these proposed incentives as essentially being overly weighted towards meeting administrative goals and under weighted towards energy savings goals. In response to the Board's Order, the utilities filed modified performance incentives on July 9, 2001 for the 2001 programs and on November 1, 2001 for the 2002 programs. The performance incentives were modified to be consistent with the Board's directive. Action on both of these requests is still pending before the Board.

Performance incentives for the 2003 programs are included in this filing. See Attachment 3. The utilities urge the Board to approve the proposed performance incentives included in this filing, as well as those proposed for 2001 and 2002 programs. Alternatively, the utilities urge the Board to direct Board Staff to convene a working group to develop performance incentives acceptable to the Board for 2003 programs and to make recommendations concerning the performance incentives earned by the utilities in 2001 and 2002.

⁴ By Order dated April 26, 2002, the Board ordered the utilities to, inter alia, suspend RFPs for program evaluation work. On June 20, 2002, the utilities requested clarification and/or reconsideration of this Order. The Board has not ruled on this motion.

Program Descriptions

Attachment 1 contains the program descriptions for the programs being proposed for 2003. Following is the list of the programs:

- Residential HVAC - Electric
- Residential HVAC - Gas
- Residential Energy Star Products
- Residential Low Income
- NJ Energy Star Homes
- Commercial / Industrial Construction
- Appliance Cycling
- Customer Sited Clean Energy Generation

As discussed above, the utilities received significant input and guidance from Board Staff in the preparation of the program proposals for 2003. As a result of this input, the Collaborative proposes the following programs be phased out or suspended upon approval of the Board:

- Residential Retrofit
- Building Operation & Maintenance
- Schools EE&RE Education

The C&I Compressed Air program is proposed to be rolled into the C&I Construction program.

Modifications to the existing programs were discussed in a prior section of this filing and are also summarized in Table 2 below.

Table 2
Summary of Proposed Program Changes

2003 Program	Proposed Changes
Residential Electric HVAC	<ul style="list-style-type: none"> • Reduced incentives • New pilot for duct sealing
Residential Gas HVAC	<ul style="list-style-type: none"> • New pilot for duct sealing
Residential Energy Star Products	<ul style="list-style-type: none"> • Program will not solicit new retailer participants pending further review. • Existing relationships and commitments with participating retailers will be maintained. • Development of a new broad based consumer effort
Residential Retrofit	<ul style="list-style-type: none"> • The program will be shut down until the Board has the opportunity to review it's merit
Residential Energy Star Homes	<ul style="list-style-type: none"> • The collaborative will evaluate and review the merits of reducing incentive levels • Program will include a core incentive cap of \$3,100
Residential Low Income	<ul style="list-style-type: none"> • The program will expand eligibility on a pilot basis to certain senior citizens who are at or below 300 % of the federal poverty level.
Commercial and Industrial Construction	<ul style="list-style-type: none"> • Development of a new program track for the direct installation of energy efficiency measures to small businesses in Urban Enterprise Zones in the service territories of JCP&L and PSE&G • The addition of a new Building Commissioning track • Development of a new School construction web page and other new efforts aimed at schools. • Will include the activities formerly associated with the Compressed Air Program
Building Operations and Maintenance	<ul style="list-style-type: none"> • The program will be closed to new participants until the Board has the opportunity to review it's merit
Compressed Air	<ul style="list-style-type: none"> • This program will be incorporated into the Commercial and Industrial Construction Program
School Energy Efficiency and Education Program	<ul style="list-style-type: none"> • The program will be shut down until the Board has the opportunity to review it's merit
Customer Sited Clean Generation Program	<ul style="list-style-type: none"> • Revised rebate incentives by technology.

Program Budgets.

Attachment 2 shows the detailed budgets on a statewide and individual company basis for each of the 2003 programs. The cost categories are the same as filed with the Board for 2001 and 2002 and are the same as those used in the quarterly reports to the Board. The budgets were

developed using a bottom-up approach for the programs as filed. Funding for these budgets may require temporarily shifting funds among program areas or advancing the funding from 2004. See the preceding Funding Options section. Board approval is required.

Table 3 shows the proposed budget for 2003 by company for each of the three program areas of energy efficiency, customer sited clean energy generation (“CSCG”) and grid supply renewable energy. The energy efficiency and customer sited clean energy generation proposed budgets were developed by the utilities. The Board administers the grid supply renewable energy program. The budget shown for that program is equal to the amount of grid supply renewable energy funding approved by the Board for 2003, which is equal to 50% of the renewable energy funding which in turn is equal to 25% of the total Board approved funding for 2003. See Table 1.

Table 3
Proposed 2003 CRA Program Budgets

(1000)	Conectiv	JCP&L	PSE&G Electric	RECO	NJNG	NUI E-Town	PSE&G Gas	SJG	Total
Energy Efficiency	\$9,323	\$29,279	\$39,607	\$609	\$3,807	\$3,077	\$13,434	\$2,966	\$102,101
CSCG	\$5,138	\$5,617	\$11,332	\$107	\$2,133	\$2,516	\$4,632	\$924	\$32,399
Grid Supply RE	\$1,429	\$4,367	\$5,423	\$67	\$527	\$527	\$2,736	\$439	\$15,516
Total	\$15,890	\$39,264	\$56,363	\$783	\$6,467	\$6,120	\$20,802	\$4,329	\$150,016

Table 4 shows the source of funding for the energy efficiency budgets in Table 3. In most cases there is sufficient funding as provided for in the Board’s March 9, 2001 Order for the utilities to meet the budget requirement for the programs as filed. However, Conectiv, JCP&L and RECO have insufficient funding for the budget necessary to implement the programs as filed. Funding options to cover these shortages were presented above and would require Board approval.

Table 4
Funding for Energy Efficiency

(1000)	Conectiv	JCP&L	PSE&G Electric	RECO	NJNG	NUI E-Town	PSE&G Gas	SJG	Total
Energy Efficiency									
2001 and 2002 BPU Ordered Funding	\$13,480	\$48,883	\$64,748	\$801	\$5,984	\$5,984	\$32,072	\$3,793	\$175,744
Less 2001 and 2002 Spent	\$15,431	\$48,901	\$53,321	\$816	\$4,881	\$4,790	\$22,085	\$3,292	\$153,517
Equals	(\$1,951)	(\$18)	\$11,427	(\$15)	\$1,103	\$1,194	\$9,987	\$501	\$22,227
Plus BPU Ordered Funding for 2003	\$8,576	\$26,204	\$32,539	\$401	\$3,163	\$3,163	\$16,417	\$2,633	\$93,095
Equals Amount Available for 2003	\$6,625	\$26,186	\$43,965	\$386	\$4,266	\$4,357	\$26,403	\$3,133	\$115,321
Less 2003 Budget	\$9,323	\$29,279	\$39,607	\$609	\$3,807	\$3,077	\$13,434	\$2,966	\$102,101
Equals Funds Balance end of 2003	(\$2,698)	(\$3,093)	\$4,358	(\$224)	\$459	\$1,280	\$12,969	\$167	\$13,220

Table 5 shows the source of funding for the customer sited renewable energy budgets in Table 3. In most cases there is sufficient funding as provided for in the Board’s March 9, 2001 Order for the utilities to meet the budget requirement for the programs as filed. However, Conectiv, New Jersey Natural Gas and NUI Elizabethtown Gas have insufficient funding for the budget

necessary to implement the programs as filed. Funding options to cover these shortages were presented above and would require Board approval.

Table 5
Funding for Customer Sited Renewable Energy

(1000)	Conectiv	JCP&L	PSE&G Electric	RECO	NJNG	NUI E-Town	PSE&G Gas	SJG	Total
Customer Sited Renewable Energy									
2001 and 2002 BPU Ordered Funding	\$2,450	\$8,956	\$11,867	\$147	\$1,096	\$1,096	\$5,865	\$688	\$32,166
Less 2001 and 2002 Spent	\$1,632	\$2,153	\$4,746	\$39	\$193	\$993	\$1,066	\$77	\$10,899
Equals	\$818	\$6,803	\$7,121	\$108	\$903	\$103	\$4,799	\$611	\$21,267
Plus BPU Ordered Funding for 2003	\$1,429	\$4,367	\$5,423	\$67	\$527	\$527	\$2,736	\$439	\$15,516
Equals Amount Available for 2003	\$2,247	\$11,170	\$12,545	\$175	\$1,431	\$631	\$7,535	\$1,050	\$36,783
Less 2003 Budget	\$5,138	\$5,617	\$11,332	\$107	\$2,133	\$2,516	\$4,632	\$924	\$32,399
Equals Funds Balance end of 2003	(\$2,891)	\$5,553	\$1,212	\$68	(\$702)	(\$1,885)	\$2,903	\$126	\$4,384

Performance Incentives

Attachment 3 includes the Collaborative's proposal for performance incentives to be awarded based on program performance in 2003.

Transition from Existing Plan to Next Plan

Unless otherwise directed by the Board, in accordance with long standing Board Policy, the utilities will continue to operate the existing Board-approved programs at the 2002 budget level filed with the Board on November 1, 2001 as long as the sum of the cumulative costs and commitments from 2001 through the present do not exceed the total amount ordered by the Board on March 9, 2001.

Conclusion and Summary of Board Actions Requested

For all the foregoing reasons, the utilities respectfully request that the Board issue an Order that:

1. Approves the programs as proposed in this filing;
2. Approves the proposed budgets and funding levels;
3. Approves the proposed performance incentives;
4. Finds that all costs the utilities incur in conjunction with the approved CRA programs are fully recoverable through the SBC or its successor mechanism. In addition, the utilities specifically request that the Board find that costs for commitments made through 2003 pursuant to Board approved CRA programs, but paid out after 2003, are fully-recoverable in rates;
5. Approves a resumption of program evaluation work;
6. Approves the utilities request for budget flexibility, as set forth in the utilities' October 2001 request;
7. Approves the transition plans for phased-out or suspended programs; and
8. Approves funding options for 2003 budgets.

Attachments

- 1. 2003 New Jersey Clean Energy Collaborative Program Descriptions*
- 2. 2003 New Jersey Clean Energy Collaborative Program Budgets*
- 3. 2003 New Jersey Clean Energy Collaborative Performance Incentives*

**New Jersey Clean Energy Collaborative
2003 Program Plan
Program Descriptions**

November 1, 2002

New Jersey Clean Energy Collaborative 2003 Program Plan

Table of Contents

Residential Electric HVAC Program	1
Residential Gas HVAC Program	5
Residential ENERGY STAR® Products Program	9
Residential Low Income Program	14
Residential New Construction Program	18
Residential Retrofit Program	23
C&I Energy Efficient Construction Program	25
C&I Building Operation & Maintenance	35
Residential Air Conditioning Cycling Load Control Program	38
School Energy Efficiency and Renewable Energy Education Program	40
Customer-Sited Clean Generation Program	41

New Jersey Clean Energy Collaborative 2003 Program Plan

Residential Electric HVAC Program

“Cool Advantage”

Overview

The Residential Electric HVAC Program offered by PSE&G, Jersey Central Power & Light, Conectiv Power Delivery, and Rockland Electric Company promotes energy efficient HVAC equipment and is designed to transform the market to one in which quality installations of high efficiency equipment are commonplace. It promotes both the sale of high efficiency equipment and improvements in sizing and installation practices that affect operating efficiency. To achieve the long-term goal of market transformation, the program must overcome a number of important market barriers. Key among these are: (1) split incentives (between builders and homebuyers and between owners and renters); (2) consumers lack of information on the benefits (both energy and non-energy) of efficient equipment and quality installations; (3) lack of training for HVAC contractors on key installation issues and approaches to “selling” efficiency; and (4) consumers inability to differentiate between good work and poor work or between quality contractors/technicians and those less skilled. The program employs several key strategies to overcome these barriers:

- Continued, but reduced, incentives for the sale or purchase and installation of high efficiency equipment for which documentation of proper sizing and installation is provided.
- Aggressive consumer marketing campaign on key elements & benefits of efficiency.
- Direct marketing to HVAC distributors and contractors through “outreach coordinators”.
- Training of HVAC contractors on key elements of quality installations.
- ENERGY STAR sales training for contractors (i.e. on how to sell efficiency).
- Promotion of HVAC technician certification.

In addition, the New Jersey utilities have supported efforts to upgrade federal appliance efficiency standards and state building codes. Activities have included technical support, dissemination of information, sponsorship of conferences on codes and standards, tracking of activities and monitoring developments, and review and modification of program designs to integrate changes to the standards and codes. The utilities will continue to support these and similar activities.

Utilities have also filed letters with state and federal agencies in support of upgraded standards and codes. Individual utilities will consider specific efforts such as writing additional letters or providing testimony, on a case-by-case base, for future upgrades to standards or codes provided that such upgrades provide benefits to New Jersey consumers.

Target Market/Eligibility

The program targets all residential dwellings (whether existing or new) into which a new central air conditioner or heat pump is being installed. Any such home that installs a new, qualifying central air conditioner or heat pump is also eligible for the program's ENERGY STAR-rated programmable thermostat offering. Builders or buyers of new homes may participate in either the Electric HVAC program or the New Jersey ENERGY STAR Homes program, but not both.

Efficiency Measures/Standards

The program promotes two efficiency tiers for central air conditioners and air source heat pumps:

- Tier 1: SEER 13, EER 11 and (in the case of heat pumps) HSPF 8
- Tier 2: SEER 14, EER 12 and (in the case of heat pumps) HSPF 8.5

In addition (i.e. under either tier), documentation of proper sizing and installation of qualifying high efficiency equipment must be submitted. In the case of units installed in new homes, this will mean (a) submission of Manual J sizing calculations, (b) documentation of proper charging, and (c) documentation that airflow is within the range recommended by manufacturers (maximum acceptable variation of plus or minus 10%). In the case of units installed in existing homes, this will mean (a) submission of Manual J sizing calculations, (b) documentation of proper charging, and (c) submission of measurements of actual airflow rates. Depending on the results of market research, analysis of program data and consideration of remediation costs to the consumer, airflow requirements for existing homes may be tightened (e.g. to same as new construction requirement) in 2003 or subsequent years.

The program also promotes ground source heat pumps with an EER of at least 13 and ENERGY STAR-rated programmable thermostats.

The utilities will continue to explore whether and how best to begin promoting duct sealing. In 2003, the utilities will implement a pilot effort to promote duct sealing in existing homes.

Incentives

Statewide incentives for high efficiency central air conditioners and air source heat pumps will be as follows:

Minimum Efficiency Standards ¹			Incentives	
SEER	EER	HSPF	Central A/C	Heat Pumps
13.00	11.00	8.00	Up to \$300	Up to \$400
14.00	12.00	8.50	Up to \$500	Up to \$650

The 2003 rebate levels have been reduced by approximately 15-20% for Tier 1 and approximately 10% for Tier 2 units. This structure is intended to drive higher participation levels to the Tier 2 level by increasing the incentive level difference between the two tiers. In addition, a relatively modest incentive level reduction should not adversely impact the progress

¹ Note that rebates are also contingent on documentation of proper sizing and installation.

made in terms of statewide consumer and contractor rebate participation, yet signal to the marketplace that future rebate levels can be expected to decline.

Statewide incentives for ground source heat pumps (reduced approximately 15% from prior year's level) and programmable thermostats will be as follows:

Ground Source Heat Pump	13 EER	Up to \$500/ton
Thermostat	ENERGY STAR-rated	Up to \$50

Incentives may be payable to the consumer, the HVAC contractor or the builder. Incentive levels will continue to be adjusted in future years as program market barriers are overcome.

Joint/Coordinated Delivery

All electric utilities will meet regularly to both coordinate the development of a consistent program design and ensure that it is implemented in a consistent fashion across the state. As noted above, the utilities will use identical program eligibility requirements, efficiency standards and incentive levels – all promoted through a single, statewide rebate form. They will also use identical inspection procedures (for quality control). In addition, the utilities will jointly sponsor contractor training and promote the same contractor certification mechanism. In addition they will jointly develop and implement, jointly or on a coordinated basis, both a marketing plan and an evaluation plan. Several program elements (e.g. evaluation, contractor outreach, duct sealing) may be implemented in conjunction with the gas HVAC program.

2003 Planned Program Activities

All the utilities are already implementing the key elements of this Program. The existing joint Program will continue with several modifications/enhancements. The utilities will jointly undertake these planned program activities:

- Develop by January 31, 2003 an updated statewide program marketing plan with a schedule of joint and coordinated activities for 2003.
- Hold an HVAC conference for contractors to promote key program features (e.g. rebate offerings, sales training and technical training) and recognize leading contractors for their efforts and effectiveness in promoting efficiency (to be done in conjunction with the gas HVAC program) by April 30, 2003.
- Evaluate opportunities for streamlining the rebate application process (e.g. short form for NATE certified contractors) while maintaining program standards for equipment sizing and installation for inclusion in the program.
- Assess the relative energy and peak demand benefits of two-speed equipment to determine whether (and how) to modify rebate structures for such equipment by March 30, 2003.
- Leverage industry resources, develop and implement a cooperative marketing initiative to engage manufacturers, distributors and contractors to promote and increase sales and installations of high efficiency HVAC systems that meet program specifications.

Performance Indicators

The following criteria may be used to judge performance based on program tracking and evaluation results:

- Market share for properly installed, high efficiency central A/Cs and heat pumps.
- Customer awareness of the benefits and key elements of efficient equipment and quality installations.
- Number of HVAC technicians/contractors with training in key elements of quality installations (e.g. sizing, charging, airflow, duct design).
- Number of certified HVAC technicians/contractors.

2003 Program Goals

The Program has several inter-related goals for the 2003 Program year. Chief among these are to:

- Increase the number of central air conditioner and heat pump rebates statewide to 5% above 2002 year-end participation rates. (despite modest reductions in rebate levels).
- Train at least 750 HVAC technicians on either Manual J load calculations (including use of software applications), proper charging and airflow, technical material that must be understood to pass the North American Technician Excellence (NATE) certification test, duct sealing, duct design using ACCA Manual D, ENERGY STAR sales techniques, and/or any other substantial form of training that is directly related to program goals. Any training conducted using essentially the same curricula promoted by the program, including training conducted by industry allies, shall count towards the goal.
- Add 500 New Jersey HVAC technicians to the list of those who are certified by NATE.
- Increase to 15% the fraction of 2003 central air conditioner buyers who (unprompted) define efficient equipment as either SEER 13, SEER 14 or “ENERGY STAR-rated” (up from 5% in the baseline study).

Minimum Requirements for Program Administration

- Collectively implement all elements of the Program in a consistent manner across the entire state.
- Collectively employ best efforts to implement planned program activities in a timely manner.
- Collectively train at least 500 HVAC technicians in the areas identified above.
- Individually achieve the following rebate participant numbers (66% of Program goal):

PSE&G	GPUE	Conectiv	RECO
TBD based on 2002 year end results	TBD based on 2002 year end results	TBD based on 2002 year end results	TBD based on 2002 year end results

New Jersey Clean Energy Collaborative 2003 Program Plan

Residential Gas HVAC Program “Warm Advantage”

Overview

The Residential Gas HVAC Program offered by PSE&G, New Jersey Natural Gas, NUI Elizabethtown Gas, and South Jersey Gas promotes energy efficient HVAC equipment and is designed to transform the market for such equipment. The Program offers rebates for the purchase of ENERGY STAR® RATED furnaces, boilers, programmable thermostats and efficient gas water heaters. It also offers sales training for HVAC technicians and contractors. The long-term goal is to transform the market to one in which high efficiency equipment becomes the market standard. The program must overcome several market barriers to achieve this goal. Key among these are: (1) consumers lack of information on the magnitude of the benefits of efficiency; (2) HVAC contractors lack of skill/tools for “selling” efficiency; (3) split incentives (between builders and homebuyers, and between owners and renters; and (4) higher costs than standard efficiency equipment related, in part, to lower sales volumes for high efficiency equipment. The program employs several key strategies to address these barriers:

- Substantial incentives for the sale and purchase of ENERGY STAR-rated heating equipment and high efficiency water heaters, declining over time as the program places greater emphasis on marketing.
- Aggressive consumer marketing campaign on the benefits of efficiency.
- Direct marketing to HVAC distributors and contractors.
- ENERGY STAR sales training for contractors (i.e. on how to sell efficiency).
- Technical training on how to install high efficiency natural gas equipment.

In addition, New Jersey utilities have supported efforts to upgrade federal appliance efficiency standards and state building codes. Activities have included technical support, dissemination of information, sponsorship of conferences on codes and standards, tracking of activities and monitoring developments, and review and modification of program designs to integrate changes to the standards and codes. The utilities will continue to support these and similar activities as part of the New Jersey Clean Energy initiative.

Utilities have also filed letters with state and federal agencies in support of upgraded standards and codes. Individual utilities will consider specific efforts such as writing additional letters or providing testimony, on a case-by-case base, for future upgrades to standards or codes provided that such upgrades provide benefits to New Jersey consumers.

Target Market/Eligibility

The program targets all residential dwellings (whether existing or new) into which a new gas furnace, boiler or water heater is being installed. Any such home that installs a new qualifying

furnace or boiler is also eligible for the program's programmable thermostat offering. Builders or buyers of new homes may participate in either the Gas HVAC program or the New Jersey ENERGY STAR Homes program, but not both.

Efficiency Measures/Standards

The program promotes heating equipment meeting the ENERGY STAR efficiency standard (i.e., minimum AFUE of 90% for furnaces and 85% for boilers). It also promotes ENERGY STAR-rated programmable thermostats and gas water heaters with an Energy Factor of at least 0.62. In 2003, the utilities will implement a pilot effort to promote duct sealing in existing homes..

Incentives

The gas utilities will offer the following incentive levels on a statewide basis in 2003:

Equipment	Minimum Efficiency	Rebate Level
Furnace	ENERGY STAR – i.e. 90% AFUE or greater	Up to \$300
Boiler	ENERGY STAR – i.e. 85% AFUE or greater	Up to \$300
Thermostat	ENERGY STAR-rated	Up to \$50
Water Heater	0.62 Energy Factor or greater	Up to \$50

Incentives for qualifying furnaces and boilers may gradually decline in future years as market penetrations of efficient equipment grows.. Incentives may be payable to the consumer, the HVAC contractor or the builder.

Joint/Coordinated Delivery

All gas utilities will meet regularly to both coordinate the development of a consistent program design and ensure that it is implemented in a consistent fashion across the state. As noted above, the utilities will use identical program eligibility requirements, efficiency standards and incentives promoted through a single, statewide rebate form. In addition, the utilities will jointly sponsor contractor sales training and jointly develop and implement both a marketing plan and an evaluation plan. Several program elements (e.g. evaluation, contractor outreach, duct sealing) may be implemented in conjunction with the electric HVAC program.

2003 Planned Program Activities

The utilities are already implementing the key elements of this Program. The existing Program will continue with several modifications/enhancements. The utilities will jointly undertake the following activities, which enhance the program:

- Develop and begin implementing a plan to support EPA development of an ENERGY STAR standard for gas water heating equipment (by May 31, 2003).
- Begin implementing a pilot duct sealing initiative (jointly with Electric HVAC program) by March 31, 2003.
- Develop by April 30, 2003 an updated statewide program marketing plan with a schedule of joint and coordinated activities for 2003.
- Hold an HVAC conference for contractors to promote key program features (e.g. rebate offerings, sales training and technical training) and recognize leading contractors for their

efforts and effectiveness in promoting efficiency (to be done in conjunction with the electric HVAC program) by April 30, 2003.

- Perform evaluation of current incentive levels and market pricing trends for high-efficiency equipment by July 31, 2003.
- Leverage industry resources, develop and implement a cooperative marketing initiative to engage manufacturers, distributors and contractors to promote and increase sales and installations of high efficiency HVAC systems that meet program specifications.

Performance Indicators

The following criteria may be used to judge performance based on program tracking and evaluation results:

- Market share for high efficiency gas furnaces and boilers.
- Customer awareness of the benefits of efficient equipment.
- Number of HVAC technicians/contractors that have received ENERGY STAR sales and high efficiency equipment installation training.

2003 Program Goals

The Program has several inter-related goals for the 2002 Program year. Chief among these are to:

- Increase the number of ENERGY STAR qualified furnaces and boilers rebated statewide to 7% above 2002 year-end participation rates.
- Increase the statewide market share for ENERGY STAR qualified furnaces to 35%.
- Provide ENERGY STAR sales training to at least 150 sales representatives of HVAC contractors.
- Hold at least one individual outreach meeting to explain and promote program offerings (e.g. rebates, sales training, other training) with at least 200 of the 400 largest HVAC contractors.
- Increase to 15% the fraction of recent furnace buyers who are aware of the availability of high efficiency equipment, and identify either 90% AFUE, 90% efficiency or ENERGY STAR-rated as the standard for high efficiency.

Minimum Requirements for Program Administration

- Collectively implement all elements of the Program in a consistent manner across the entire state.
- Collectively employ best efforts to implement planned program activities in a timely manner.
- Provide ENERGY STAR sales and/or installation training to at least 100 sales representatives of HVAC contractors.

- Individually achieve the following furnace/boiler rebate participant numbers (66% of program goal).

PSE&G	NJNG	Elizabethtown	SJG
TBD based on 2002 year-end results	TBD based on 2002 year-end results	TBD based on 2002 year-end results	TBD based on 2002 year-end results

New Jersey Clean Energy Collaborative 2003 Program Plan

Residential ENERGY STAR® Products Program

“New Jersey for ENERGY STAR”

Overview

The Residential ENERGY STAR® Products Program offered by PSE&G, JCP&L, NUI Elizabethtown Gas, New Jersey Natural Gas, South Jersey Gas, and Conectiv Power Delivery (the utilities) promotes the sale and purchase of ENERGY STAR rated and labeled residential products. This program plan presents a synthesis of the three, separate Energy Star® Products Programs that were first implemented in 2001 by the New Jersey utilities and merged into a single program for 2002. The three product initiatives – lighting, appliances, and windows – share many common goals, strategies, and implementation components. This single program proved to be an effective approach for 2002 and will be continued in 2003. The 2003 Plan reflects the working knowledge and experience with market channels, market barriers, and the commercialization status of the three product lines acquired since the inception of the program and input from lighting, appliance, and windows industry participants. In addition, it incorporates the NJBPU staff request that the program not expand its marketing and recruitment activities beyond those already committed, pending review of the feasibility of incorporating a broad based consumer element into the program. In compliance with that request, the program has reduced its 2003 budget by \$2 million and will not expand beyond the activities, commitments, and goals contained in the 2002 plan until such review has been completed.

The long-term goal is to transform the market into one in which ENERGY STAR residential products become the market standard. The program employs several key strategies to accomplish this goal. Strategies common to the promotion of all three products include:

- A consumer marketing campaign promoting ENERGY STAR labeled products – integrated to the extent appropriate with marketing of other New Jersey programs promoting ENERGY STAR products and energy efficiency (i.e. Residential New Construction, Low Income, Electric and Gas HVAC).
- Sales training and marketing support to retailers and contractors selling ENERGY STAR products.
- Development of long term relationships with all key market actors involved in the manufacturing, distribution, sales and installation of residential ENERGY STAR products.
- Implementation of a co-op advertising and special promotions program to encourage the active promotion of ENERGY STAR products by manufacturers and retailers.
- Support development of state appliance standards (e.g. torchieres, & ceiling fans), minimum federal appliance efficiency standards and ENERGY STAR appliance specifications, as appropriate.

- Leverage national programs, promotions, marketing materials, and advertising where ever possible.
- Continue outreach to regional window industry representatives to encourage labeling and promotion of ENERGY STAR windows.

Consumer education, retailer support, and direct-to-consumers product offerings in partnership with manufacturers and distributors were developed and implemented in 2002 and will continue to be the principal focus of the ENERGY STAR Products Program in 2003. Marketing efforts may include a variety of short-term promotional events to generate retailer and consumer interest in ENERGY STAR labeled products. With these promotional efforts, the utilities may provide incentives for any of the eligible ENERGY STAR products. Incentives may be paid to distributors, retailers and/or to end-use purchasers, which may include residential customers, builders, and contractors.

Target Market/Eligibility

Any New Jersey residential customer, retailer, or any contractor or builder purchasing new ENERGY STAR lighting, appliances, or windows for installation in New Jersey residences is eligible to participate.

Efficiency Measures/Standards

Lighting

The Program will continue to address four ENERGY STAR rated and labeled lighting technologies -- screw-based bulbs, hardwired fixtures, portable fixtures and ceiling fans. For ENERGY STAR ceilings fans, qualified products will be those fans with lighting, or separately packaged lighting kits for ceiling fans. Although market transformation in the lighting market requires that ENERGY STAR labeled fixtures become the market standard, the immediate benefits from Compact Fluorescent Lights (CFL's) will also be emphasized to introduce ENERGY STAR lighting to residents of New Jersey and to lead to changes in their purchasing behavior.

Appliances

The primary focus of the Program will continue to be on four appliances -- refrigerators, clothes washers, dishwashers, and room air conditioners. As the Program develops additional products are likely to be added to the ENERGY STAR list. The ENERGY STAR specifications for each product are also likely to evolve as federal standards change and new products enter the market. The Program will participate in these specification development processes and adapt to these types of changes as appropriate.

Windows

The program currently promotes windows meeting the ENERGY STAR efficiency standard (i.e. minimum U-value of 0.40 and maximum solar heat gain coefficient (SHGC) of 0.55). This is the current specification for locations within the central region of the United States. In September 2001, DOE proposed revisions to the ENERGY STAR window specification; however, to date implementation of these changes has been postponed. When the proposed changes are accepted the ENERGY STAR criteria for the New Jersey program will change.

Incentives

The utilities may offer financial incentives or other inducements to ENERGY STAR product retailers, manufacturers, buyers groups, or dealers to increase the stocking, promotion, and sales of these products. The Program will not provide any continuous consumer incentives, but may provide consumer rebates as part of targeted promotions of limited duration.

Any consumer or industry incentives may be reduced or eliminated over time in response to market changes such as increased market shares for ENERGY STAR products.

Joint/Coordinated Delivery

The utilities will coordinate the development of a consistent program design and ensure that it is implemented in a consistent fashion across the state. The utilities will continue with joint evaluation efforts. The utilities will ensure that consistent retail marketing support activities are provided statewide and that joint manufacturer outreach activities be undertaken. Individual utilities and/or their contractors may supplement joint program delivery, marketing, and outreach efforts. Such activities will be coordinated with any joint program efforts.

Evaluation activities will include regular brief market progress reports based largely on analysis of Program data and, less frequently, comprehensive field evaluations to assess program effectiveness and changes in key market indicators.

This program will be coordinated, as appropriate, with similar regional and national efforts that improve the effectiveness or cost-effectiveness of program strategies to achieve NJ program goals and objectives.

The Program's marketing messages will be delivered through multiple channels (e.g. point of sale, print, radio, television, customer bill insert, and the internet), as appropriate. Program marketing efforts will also be integrated with the other New Jersey residential ENERGY STAR and energy efficiency Programs i.e., Residential New Construction, Low Income, Electric and Gas HVAC, as appropriate.

2003 Planned Program Activities

The utilities will jointly implement the following planned program activities to support Residential Energy Star Product Program development and implementation:

- Continue co-op lighting activities implemented in 2002 by leveraging lighting fixture and CFL retailers/manufacturers' funding and market initiatives. Evaluate results and determine which type of projects will continue to be supported.
- Continue the co-op marketing initiatives for appliances and windows implemented in 2002 by leveraging retailers/manufacturers' funding and market initiatives. Evaluate results and determine which projects will continue to be supported.
- Continue to monitor DOE deliberations on ENERGY STAR windows, and to comment, as appropriate, on any proposed specifications changes.

- Develop an ENERGY STAR fixture stocking and display program for lighting showrooms. Lighting showrooms are a key market that serves both consumers and contractors, but has limited or no ENERGY STAR lighting fixtures on display and available for purchase.
- Develop a lighting showroom re-lamping program that provides incentives for lighting showrooms to replace incandescent lights in their display fixtures with CFLs. When implemented this will result in immediate energy savings.
- Monitor ongoing efforts to revise and develop ENERGY STAR specifications and federal minimum standards for telephony and consumer electronics.

Performance Indicators

The Program is intended to generate critical measurable results and momentum towards the transformation of targeted ENERGY STAR Products markets. The following market indicators may be used to judge performance based on program tracking and evaluation results:

- Market share for specific ENERGY STAR products, accounting separately for new construction and retrofit opportunities.
- Availability of specific ENERGY STAR products (e.g. retailer stocking and display patterns).
- Increased production and availability of efficient products for common applications.
- Decreases in the incremental first costs of ENERGY STAR products.
- Customer and salesperson awareness and understanding of the ENERGY STAR label.
- Influence of the ENERGY STAR brand when making purchases.
- Customer and salesperson awareness of the benefits of efficient products.
- The level of trade allies marketing (or co-marketing) of ENERGY STAR products.

2003 Program Goals

The ENERGY STAR Product Program has several common, inter-related goals for the 2003 Program year:

- Maintain retailer ENERGY STAR partner commitments. This includes placing marketing materials in the stores that promote ENERGY STAR products, training sales associates in the benefits of and how to sell ENERGY STAR products, and continuing to sponsor co-op advertising and product promotions that at least 15% of enlisted program retailers of each of the three product categories participate in by year-end.
- Develop a broad based consumer promotion designed to have the most benefit to NJ consumers with input from NJBPU, Ratepayer Advocate, and industry. The ENERGY STAR product(s) to be promoted (e.g. CFLs, clothes washers) will be selected in consultation with NJBPU, RPA, and industry experts.
- Complete all planned 2003 Evaluation activities identified in the Evaluation Plan by revised dates. At minimum these will include the process evaluation and market progress reports that were started in March 2002 and placed on hold in July 2002 pending NJBPU review.
- Develop and implement methodology for tracking market share of ENERGY STAR lighting, windows, and appliances sold to consumers in New Jersey.

Minimum Requirements for Program Implementation

- Collectively implement the Program in a consistent manner across the entire state.
- Collectively employ best efforts to implement planned program activities in a timely manner.
- Collectively complete three of the four program goals listed above.

New Jersey Clean Energy Collaborative 2003 Program Plan

Residential Low Income Program

“New Jersey Comfort Partners”

Overview

The Residential Low Income Program known as Comfort Partners, offered by Conectiv Power Delivery, JCP&L, New Jersey Natural Gas, NUI Elizabethtown Gas, PSE&G, Rockland Electric Company, and South Jersey Gas, is designed to improve energy affordability for low-income households. To achieve this objective, it must overcome several market barriers. Key among these are: (1) lack of information on either how to improve efficiency or the benefits of efficiency; (2) low income customers do not have the capital necessary to upgrade efficiency or even, in many cases, keep up with regular bills; (3) low income customers are the least likely target of market-based residential service providers due to perceptions of less capital, credit risk and/or high transaction costs; and (4) split incentives between renters and landlords. The Program addresses these barriers through:

- Direct installation of all cost-effective energy efficiency measures (addressing all fuels).
- Comprehensive, personalized customer energy education and counseling.
- Arrearage reduction for participants who agree to payment plans.

Target Market/Eligibility

This Program will be targeted at two market segments: 1) Low-income, and 2) Means-tested Seniors who heat with electric heat. The Seniors portion is a pilot program.

The Low-income portion of the Program is available to any household with income at or below 150% of the federal poverty guidelines. Customers who receive Lifeline assistance and/or Safety Net Partnership and/or LIHEAP are also eligible.

The pilot program for seniors with electric heat will be made available to households where the head of household is age 65 or older, and where the primary form of space heating is electric heat. Household income must be at or below 300% of federal poverty guidelines.

Efficiency Measures/Standards

All cost-effective efficiency measures will be installed in each home (no cost cap). Cost-effectiveness will be assessed on a site-specific basis. Among the measures to be considered for each home are efficient lighting products; hot water conservation measures (tank wraps, pipe wrap, tank temperature turn-down, and energy saving showerheads and aerators); replacement of inefficient refrigerators; energy saving thermostats; insulation up-grades (attic, wall, basement, etc.); blower-door guided air sealing; duct sealing and repair; heating/cooling equipment maintenance, repair and/or replacement; and other “custom” measures.

Incentives

All cost-effective efficiency measures will be installed in each home. Cost-effectiveness will be assessed on a measure and site-specific basis. All efficiency measures and energy education services will be provided free of charge. The selection of measures designed to reduce heating and cooling will be guided by a space conditioning allowance which is a guide for contractors, and is not an absolute or prescriptive target or cap. If the site needs are greater than or less than the calculated allowance, the contractor will act accordingly and document the reasons for the deviation from default expectations.

Refrigerator replacement will be based on on-site monitoring of the existing unit. Consumption thresholds for cost effective replacement vary according to size class. Any refrigerator with measured consumption above the threshold values is eligible for free replacement with a new energy-efficient model. These values and procedures will be updated periodically to reflect changes in refrigerator costs and/or efficiency.

The cost effective installation of energy-efficient lighting products will be based upon the wattage and the estimated average daily burn time for the existing lamp.

Domestic hot water and other custom measures also will be installed according to Program guidelines for determining measure cost effectiveness.

In addition, participants who are in arrears on their energy bills and agree to a payment plan will be eligible to receive arrearage reductions. The structure and details of the arrearage forgiveness plans vary by participating utility with a maximum arrearage reduction of \$750 per participant. The Collaborative is continuing to work towards greater consistency in their plans and in adapting to best practices.

Joint/Coordinated Delivery

Electric and gas utilities with overlapping service territories will jointly deliver – through the same Program delivery contractor – efficiency and energy education services so that customers receive both gas and electric efficiency measures simultaneously. Selection of Program delivery contractors and the fixed Program delivery costs are shared between the participating gas and electric utilities.

Planned Program Activities

Within 120 days of BPU approval the Seniors pilot program will be made available to eligible participants.

The initial set of Comfort Partners evaluation reports, regarding the program tracking system and the process and comprehensiveness of program implementation, have been received. The Comfort Partners Working Group fully intends to implement as many of the report recommendations as possible during the 2003 program year, recognizing that some changes might require a multi-year effort (e.g., coordination and integration with Community-Based Organizations and the federal Low-Income Weatherization Assistance Program) while others may be immediately adopted (e.g., adopting the recommended Minimum Ventilation Guideline).

In recognition of the challenges posed by this ambition, the Working Group already has organized itself into three sub-groups (one for each evaluation report), each charged with developing the means necessary for implementing report recommendations. The intent is to have plans in place by the end of 2002 for 2003 implementation. In some instances, the recommendations may have already been implemented by the end of 2002.

Specific Activities/Timelines

The utilities will jointly meet the activities for program implementation in 2003 as identified in the table below.

Specific Activities	Timeline *
Completion of procedures/specifications manuals revision	3/3/03
Implement consistent 3 rd party Quality Assurance procedures/schedules	3/3/03
Introduce quarterly Working Group management reports	4/1/03
Roll-out Seniors Pilot	6/1/03
Implement single statewide data tracking/reporting system	10/1/03

*Compliance consists of completing activity within 30 days of timeline

Performance Indicators

The following criteria may be used to judge performance:

- Number of households treated.
- Average savings per participant (by housing type).
- In the case of low income participants (those at or below 150% of federal poverty guidelines) impacts on energy affordability of Program participants will be accessed.
- Comprehensiveness of treatment of efficiency opportunities (or, conversely, magnitude of missed opportunities).
- Customer satisfaction.

2003 Program Goals

Participant targets for each utility for the low-income component in 2003 are displayed in the table below. The table figures are not additive. The total statewide participation is expected to be 6045, which is the sum of the electric participants (all households have electric service). The 5,069 gas participants are a subset of this total.

Electric				Gas			
PSE&G	JCP&L	Conectiv	RECO	PSE&G	NJNG	SJG	NUI-Etown
4,000	1500	525	20	3,400	733	300	636

The 2003 statewide enrollment goal in the arrears reduction program is 3,400. Customers who participate in both the gas and electric utilities' arrears programs are counted by each utility. The utilities also have the following individual targets for enrollment in their arrears reduction plans:

Electric				Gas			
PSE&G	JCP&L	Conectiv	RECO	PSE&G	NJNG	SJG	NUI-Etown
1,200	660	100	5	1,020	150	125	140

The program evaluation will also measure other important performance indicators identified in the evaluation plan. These include the comprehensiveness of treatment of efficiency opportunities (or, conversely, magnitude of missed opportunities). The program savings goals in 2003 are to achieve 10% average savings on total electric use for electrically heated homes and 15% average savings on total gas use for gas heated homes. The savings calculation initially will be based on energy savings protocols filed with the BPU for approval on July 9, 2001. It is anticipated that these protocols will be adjusted as baseline and impact evaluation data becomes available.

Minimum Requirements for Program Administration

- Collectively reach a minimum of 60% of both the participation and arrearage enrollment program goals.
- Complete on time at least three of the four activities identified in the table above.

New Jersey Clean Energy Collaborative 2003 Program Plan

Residential New Construction Program

“New Jersey ENERGY STAR Homes Program”

Overview

The Residential New Construction Program, offered by PSE&G, JCP&L, Conectiv Power Delivery, Rockland Electric Company, New Jersey Natural Gas, NUI/Elizabethtown Gas and South Jersey Gas, is designed to increase the efficiency of residential new construction, with the long term goal of transforming the market to one in which all new homes are built at least as efficiently as the current ENERGY STAR homes standard. There are a number of market barriers to efficiency investments in new construction. Key among these are: (1) split incentives (i.e. builders who make design decisions will not pay the energy bills associated with those decisions); (2) lack of information on the benefits of efficiency (on the part of consumers, builders, lenders, appraisers, realtors and others); (3) limited technical skills to address key elements of efficiency; and (4) inability of consumers, lenders, appraisers and others to differentiate between efficient and standard homes. The program may employ several key strategies to overcome these barriers:

- Marketing assistance to builders of efficient homes (promoting ENERGY STAR label).
- Technical assistance to builders and their subcontractors.
- Home energy ratings and ENERGY STAR certification to qualified homes.
- Incentives to builders to construct homes to program standards.
- Support to the Department of Community Affairs to foster the development of market-based mechanisms to facilitate market transformation, including a uniform statewide energy rating system, accreditation of raters.
- Technical support/training on residential energy code updates and implementation.

Target Market/Eligibility

Any new home or existing home undergoing substantial (gut) renovation or remodeling is eligible to participate if it has gas heat, electric heat and/or central air conditioning. Both single family and multi-family buildings are eligible as long as they are individually metered (i.e. non-commercial accounts). Customers may choose to participate in either the Residential New Construction Program or one of the HVAC programs, but not both.

Efficiency Measures/Standards

To participate in the program a home must: (1) meet a *performance standard* of at least 30% less energy consumption (same as EPA's ENERGY STAR Homes standard) than if it had been built to the national model energy code; (2) document proper HVAC equipment sizing and installation; (3) fully seal all HVAC duct system joints and seams; and (4) seal up for reduced air leakage; (5) install a minimum of three ENERGY STAR hard-wired light fixtures. The performance standard can be met through any combination of insulation up-grades, efficient

windows, air sealing, efficient HVAC equipment, and/or duct sealing. A home energy rating (score of 86 points) will be required to demonstrate a combination of such measures has resulted in attainment of the standard.

Homes meeting the program standards are also eligible for supplemental incentives for high efficiency lighting fixtures over and above the mandatory three fixtures, washing machines and ventilation equipment.

Incentives

Incentives reflect changing baselines, market barriers to efficiency improvements and incremental costs of efficiency improvements. Currently, they are designed to cover approximately 100% of the incremental cost of efficiency up-grades for homes with electric heat or gas heat and approximately 50% of incremental cost for homes with central air conditioning and oil or propane heat. As program participation grows, market barriers become less severe and/or baselines increase, incentives in future years may be reduced. In 2003 an analysis will be conducted to evaluate the appropriate incentive levels. Incentives for efficient light fixtures, washing machines and ventilation equipment are also based on the severity of market barriers, baseline practices and incremental costs of efficiency.

For 2003, the Program will offer three different incentives. First, and most important, are incentives for building a home to the Program's core efficiency standard for building shell and HVAC equipment. The Program standard is a Home Energy Rating System (HERS) score of at least 86.0 points, plus certain prescriptive requirements for 1) central air conditioners and/or heat pumps (where applicable); 2) ducts (where applicable); and 3) house air sealing. This core incentive varies by dwelling type as follows:

Table 1: Core Incentive

Dwelling Type	Incentive Level* up to \$3,100 maximum
Single Family	Up to \$700 + \$.60/sq. ft.
Multiple Single Family ("Townhouse")	Up to \$200 + \$.60/sq. ft.
Multiple-Family Building ("Multi-Family")	Up to \$50 per dwelling unit + \$.60/sq. ft.

*For all residential conditioned floor space.

The HVAC equipment incentives are the same as those offered under the Residential Electric HVAC and Gas HVAC Programs. The HVAC equipment incentives follow:

Table 2: HVAC Equipment Incentives

Equipment Type	Minimum Efficiency Standards	Incentive Level*
Gas Boiler	Energy Star – 85% AFUE	Up to \$300
Gas Furnace	Energy Star – 90% AFUE	Up to \$300
Central A/C	13 SEER, 11 EER	Up to \$300
Central A/C	14 SEER, 12 EER	Up to \$500
Heat Pump	13 SEER, 11 EER, 8.0 HSPF	Up to \$400
Heat Pump	14 SEER, 12 EER, 8.5 HSPF	Up to \$650
Ground Source Heat Pump	13 EER	Up to \$500/ton

*Per installed unit.

Homes that qualify for the Program's core incentives are also eligible for supplemental incentives for other end uses. These are as follows:

Table 3: Supplemental Incentives

Measure	Efficiency Standard	Incentive Level
Washing Machine	ENERGY STAR model	Up to \$175
Light Fixtures – over the required three (3)	Unlimited quantities of ENERGY STAR light fixtures in high-use locations (not closets, garages, unfinished basements or other locations where lights are typically on for less than 2 hours/day)	Up to \$30 for recessed cans Up to \$20 for all others
Mechanical Ventilation System	Ducted fan (Maximum .5 watts/cfm and 2.0 sones and/or ENERGY STAR labeled), heat-recovery ventilator or energy-recovery ventilator; on automatic control. Maximum of one system for 1,000 dwelling sq. ft. of conditioned space	Up to \$100 per system

Joint/Coordinated Delivery

All gas and electric utilities meet regularly to ensure that the Program is implemented in a consistent fashion across the state. As noted above, the utilities use identical program eligibility requirements, efficiency standards (including verification with home energy ratings) and incentive levels. In addition, the utilities will execute a joint marketing strategy and a joint evaluation plan with at least 50% of utilities' marketing budgets to be spent on statewide marketing activities. Finally, the utilities will assist the Department of Community Affairs with the development of a statewide rating system, rater accreditation infrastructure, and mechanisms for promoting market transformation.

2003 Planned Program Activities

The utilities will jointly undertake the following program activities for implementation of the statewide Program:

- Complete the marketing plan update by January 31, 2003.
- Complete the process evaluation (i.e. receive final report) by December 31, 2003.
- Develop a plan by November 1, 2003 to open up the delivery of the New Jersey ENERGY STAR Homes Program to a competitive market-based HERS delivery infrastructure, while still maintaining Program standards, consistency and quality assurance.
- Develop a plan by March 1, 2003 to reduce the per-participant Program delivery costs while still maintaining program standards and quality assurance.
- An incentive analysis will be completed by March 1, 2003 to address appropriate builder incentive payments. In addition, analysis will look at the concept of a rating incentive scale as well as urban area incentive treatment.
- Examine the feasibility to require mechanical ventilation for program participation by August 1, 2003;

- Develop a plan for coordination with the CSCG Program by June 1, 2003.
- Develop a plan for coordination with the Products Program by June 1, 2003.

Performance Indicators

The following criteria may be used to judge performance based on program tracking and evaluation results:

- Market share for ENERGY STAR homes; Leveraging trade ally relationships.
- Increasing availability/use of home energy ratings.

2003 Program Goals

The ENERGY STAR Homes Program has several inter-related goals for the 2003 Program year, including the following:

Enroll at least 20% of the total New Jersey permits issued for residential new construction dwelling units (single family, townhouse and multi-family) with commitments² to build to the ENERGY STAR Homes Program's efficiency standards when the units are constructed³:

- Certify at least 3,000 ENERGY STAR Homes by December 31, 2003.
- Train⁴ at least 325 builders, subcontractors and architects on Program elements and aspects that will improve the energy efficiency, performance and sales of homes they design and build.

Minimum Requirements for Program Administration

- Collectively implement all elements of the Program in a consistent manner across the entire state.
- Collectively employ best efforts to implement planned program activities in a timely manner.
- Individually achieve at least 60% of the following enrollment participant goal numbers for a projected⁵ total of 2,760 committed homes (i.e. 60% of the statewide goal of 20% of residential permits issued for 2003).

² "Commitment" means a signed agreement by the Program participant to construct and complete each enrolled dwelling unit to the Program standards.

³ Program goals include homes served by both gas and electric companies. A home served by both counts towards each company's minimum requirements. However, it counts as only one "enrollment" towards the statewide goal.

⁴ "Training shall include classroom, small group, one-on-one, on-site and internet-based or other computer-based education. Builder "kick-off" meetings do not count towards training goals. Training topic areas include building science and energy efficiency (e.g. duct design, duct sealing, HVAC charge and air flow, HVAC sizing, air sealing, insulation, building envelope, lighting, appliances, etc.) and Energy Star Home's marketing.

⁵ Projected residential permits for 2003 is 23,000. The 20% commitments represent 4,600 housing units. The actual commitment goal will be tracked and adjusted monthly as permit data from the DCA is released.

Table 4: Example of Commitments Based on Assumed 23,000 Permits in 2003

	Conectiv	JCP&L	RECO	PSE&G Electric	NUI/E- Town	NJNG	PSE&G Gas	SJG
2003 Goal	861	1,097	34	2,608	509	708	2,689	694
60% of Goal	517	658	20	1,565	306	425	1,613	417

New Jersey Clean Energy Collaborative 2003 Program Plan

Residential Retrofit Program

“New Jersey Energy Smart Program”

Overview

Through the New Jersey Energy Smart Program, PSE&G, JCP&L, Conectiv Power Delivery, New Jersey Natural Gas, NUI Elizabethtown Gas, and South Jersey Gas provide interested customers with New Jersey, and customer specific, information on energy use, energy efficiency, and renewable energy. The program operates to reduce informational barriers to consumer investments in efficiency and renewable energy. It also cross-promotes and increases participation in the other residential efficiency and renewable energy programs available to residential customers in New Jersey.

Through this program the utilities provide a sophisticated software tool⁶ to help customers assess both the efficiency of their energy use and opportunities for improving efficiency. Program services are available through the Internet and via mail (in response to phone or mail inquiries) for those customers who do not have access to a computer. Trained customer service representatives are also available through a toll-free number to answer consumer questions on energy efficiency issues, to provide customer's with assistance in completing the Home Energy Analysis tool, and to answer questions and provide references to other relevant efficiency and renewable energy programs. By taking advantage of new information and communications technologies the New Jersey Energy Smart Program provides custom information to participants at a much lower cost per participant than traditional on-site energy audits.

Target Market/Eligibility

All individually metered residential customers in rental or owner occupied housing are eligible to participate in the New Jersey Energy Smart Program. Program outreach and marketing varies by utility and includes both relatively broad-based promotion channels such as billing announcements and radio advertising, and more targeted channels such as web-site banners and call center responses.

Efficiency Measures/Standards

The current program offers customers printed and software based information tools that they can use to better understand and assess their energy use. Customers participate by completing an easy to use billing disaggregation tool, which asks for energy consumption history, demographic, and household information. The program then provides the customer with an analysis of their energy usage patterns, a comparison of this usage to other similar New Jersey households, and recommended energy saving measures that are specific to their situation. This includes context sensitive information on other New Jersey Clean Energy Programs (for example promotion of

⁶ The Home Energy Analyzer, from Nexus Energy Software, Inc.

the Warm Advantage program to customers with older heating systems). Toll-free telephone assistance is available to help customers complete the analysis, to provide information on the other energy efficiency programs, and to help answer questions on home energy use and comfort.

Incentives

Program services are provided free of charge.

2003 Planned Program Activity

Until such time as the 2003 filing is approved, the utilities will continue to make available, a computer web based and mail back self audit tool, as described in the 2002 filing. Within 30 days of approval of the 2003 filing, the current program will be discontinued. However, the utilities will investigate other means to offer consumers an opportunity to perform a web based home energy analysis, such as the DOE Home Energy Saver (HES) audit.

Program Performance Indicators

None.

2003 Program Goals

None.

New Jersey Clean Energy Collaborative 2003 Program Plan

C&I Energy Efficient Construction Program

“New Jersey SmartStart Buildings®”

Overview

The C&I Energy Efficient Construction Program (C&IEECP) – New Jersey SmartStart Buildings® – will continue to be offered by PSE&G, JCP&L, Conectiv Power Delivery, Rockland Electric Company, New Jersey Natural Gas, Elizabethtown Gas and South Jersey Gas. The Program is designed to:

- Capture lost opportunity energy efficiency savings that occur during customer-initiated construction events (i.e., when customers normally construct buildings or buy equipment).
- Achieve market transformation by helping customers, designers and specifiers to make energy efficient equipment specification, building/system design, lighting design, and commissioning standard parts of their business practices.
- Stimulate small customer investments in energy efficiency measures.
- Help facilitate effective implementation of New Jersey’s new commercial code and future upgrades to that code.

This program has been designed to address key market barriers to efficient building construction and design on the part of developers, designers, engineers, and contractors including: unfamiliarity or uncertainty with energy efficient building technologies and designs; bias toward first cost versus operating costs; compressed time schedules for design and construction; aversion to perceived risk-taking, despite the proven reliability of efficient technologies and designs; and incentive structures and priorities for engineers, designers and contractors which are at variance with efficiency considerations.

The program employs a comprehensive set of offerings and strategies to address the market barriers noted above and to, subsequently, achieve market transformation in equipment specification, building/system design, lighting design, and building commissioning. These include:

- Program emphasis on customer-initiated construction and equipment replacement events that are a normal part of their business practice.
- Coordinated and consistent marketing to commercial and industrial customers, especially large and centralized players, such as national/regional accounts, major developers, etc.
- Consistent efficiency and incentive levels for efficient electric and gas equipment and design practices to permanently raise efficiency levels.
- Prescriptive incentives for pre-identified efficiency equipment and custom measure incentives for more complex and aggressive measures to permanently raise the efficiency levels of standard equipment.

- Design support/technical assistance to developers and their design team for new construction and renovation projects to permanently raise the efficiency levels of design practices.
- Specialized technical assistance for small commercial customers and educational institutions.
- Specialized program paths for markets with unique opportunities for energy savings and market transformation including lighting design, chiller optimization and commissioning.
- Technical support for newly enacted commercial energy code including training in energy code requirements.

Target Markets/Eligibility

Commercial, educational, governmental/institutional, industrial, and agricultural customers engaged in customer-initiated construction events including new construction, renovations, building additions, remodeling, equipment replacement, and manufacturing process improvements. In addition, the program may be used to address economic development opportunities and transmission and distribution system constraints.

Program Offerings and Customer Incentives

The program will continue to offer the following:

- Core Program Offerings Prescriptive Efficiency Measure Rebates that provide fixed incentives for energy efficiency measures. Incentives are based on incremental costs (i.e., the additional cost above baseline equipment), in consideration of market barriers, changes in baselines over time and market transformation objectives. Eligible electric and gas energy efficiency measures include lighting equipment and controls, motors, unitary HVAC equipment, chillers, variable speed drive applications and gas heating and water heating equipment.
- Custom Measure Incentives for more complex and aggressive custom efficiency measures. Incentives are based on incremental equipment and labor costs, in consideration of market barriers, changes in baselines over time and market transformation objectives. Eligible electric and gas measures include lighting systems, HVAC systems, motor systems, large boiler systems, gas-engine driven chillers and other non-prescriptive measures proposed by the customer.
- Multiple Measure Incentives for more comprehensive selections of gas and electric energy efficiency measures (i.e., two or more of the following equipment types – lighting equipment and controls, unitary HVAC, chillers, electric and gas space heating, gas water heating, motors, and/or variable speed drives) that result in energy savings. . Incentives are based on incremental costs, in consideration of market barriers, changes in baselines over time and market transformation objectives.
- Design Incentives and Support, including building simulation, to architects and engineers to consider and use integrated design approaches that provide additional, synergistic energy savings. The design incentives cover a portion of the incremental cost for additional energy efficient design services over the base cost of building design.
- Technical Assistance and oversight to help customers evaluate energy efficiency options, utilize program offerings and services, and effectively use performance-contracted

services. In addition, targeted technical assistance, and targeted incentives, will be provided to small commercial customers.

- Incentives and Technical Support for Commissioning Services for qualified new construction and large projects.
- Pilot programs that provide the ability to implement a limited, controlled trial of appropriate technologies and potential energy efficiency offerings.
- Coordinated and consistent marketing strategy including:
 - a) Coordinated marketing to large and centralized players (such as national/regional accounts, major developers, local contractors, and architect/engineering firms).
 - b) Coordinated marketing such as advertising, promotions, trade shows, and collateral marketing materials.
 - c) Coordinated retail/local outreach and technical assistance for all fuel types so that all customers have equal access to the program offerings.

Specialized Markets/Program Paths

In addition to the core offerings, opportunities aligned with program goals will also be developed. The following specialized program paths are now offered.

Chiller Optimization

Designed to (a) capture potential additional savings available at the time of a chiller replacement or conversion to a new refrigerant, and (b) help to lay the foundation for market-based comprehensive treatment of major HVAC replacement projects. By examining ways to optimize the efficiency of the chiller in relation to its distribution systems (pumps, fans, ducts, pipes, controls, etc.) while simultaneously reducing other building cooling loads (such as lighting), it is often possible to reduce the size (and thus cost and peak demand) of the replacement chiller. Additional benefits can include a better performing building and improved savings from the ancillary efficiency measures. Due to the complexity, this path will be attractive only to those customers who are willing to devote the time, attention, and capital to an optimized system.

This path will be targeted to C&I customers with large chiller plants (of 500 tons or more) that are in line for replacement, conversion, or addition of chiller capacity. The path provides Technical Assistance for studies to identify potential savings and incentives for chiller replacements as well as incentives for lighting system improvements and auxiliary enhancements, such as fans, pumps, motors, ducts, pipes, controls etc., at either: a) the prescriptive level for prescriptive items or b) at a level defined by the Custom Measures approach for non-prescriptive measures.

Municipal Government Facilities

To support understanding and development of market-based performance contracts through education, training, technical assistance, and seminars.

Schools

To provide assistance to ensure that all schools take full advantage of existing program offerings and incentives, as well as technical assistance regarding the energy efficiency requirements of the LEED program.

A web page will be developed to provide specific information related to schools construction including the appropriate links for researching additional information and organizations.

In addition, for the Abbott School Districts, the SSB Program will conduct a pilot effort in 2003 to provide: a) Comprehensive Design Support services to both the New Jersey Economic Development Authority and those firms selected by EDA to design Abbott Schools projects in 2003, and b) enhanced SSB incentives that could equal up to 100% of incremental cost funding for select efficiency measures for Abbott Schools that complete the design phase in 2003 and are scheduled to engage in renovations or new facility construction in 2003 and 2004. Enhanced Abbott School incentives will be contingent on the acceptance of the efficiency measure recommendations provided by the New Jersey SmartStart Buildings Program. In 2003, a plan will be developed to provide additional incentives for design teams for K-12 schools that achieve energy efficiency levels greater than current ASHRAE standards and codes. In an effort to assist the timely review of such designs, the Collaborative will establish a single point of contact to work with the customer and their design team.

Lighting Remodeling

To provide specialized marketing, standardized technical assistance tools, and training to help contractors design, recommend and install energy efficient lighting systems. This path is explicitly designed to transform lighting design practices during remodeling through training, using a three tiered training approach beginning with information sessions to introduce Design Lighting concepts and techniques to contractor and specifiers. The next tier recruits attendees to participate in roundtable training discussions to explore case study design guides and the third tier recruits participants to engage in hands on demonstration projects at customer locations.

Building Commissioning

The New Jersey Department of Community Affairs (DCA) now enforces the ASHRAE Standard 90.1-1999 as a revised Energy sub-code, part of the NJ Uniform Construction Code effective on July 16, 2002. The code now includes a requirement that a plan for "System Commissioning" be developed for new construction projects larger than 50,000 sq. ft. of conditioned space. The DCA has the responsibility to enforce this new requirement. The New Jersey electric and gas utilities will work with DCA to assist in the development of technically sound administration and enforce the "System Commissioning" provisions, in a consistent manner, on all qualifying projects. This may include: 1) providing necessary education and training to code enforcement officials; 2) helping DCA to develop and adopt "System Commissioning" guidelines that can be disseminated to the design community; and/or 3) other measures. The program will also work with NJ colleges and universities to investigate potential re-commissioning pilot projects.

In addition, the program will continue to offer incentives and technical support for commissioning services for mechanical systems of selected projects, at least through 2003.

Compressed Air

To capture significant energy savings from compressed air system optimization in industrial facilities, containing significant compressed air systems (over 100 HP). These customers encompass many key New Jersey industries including plastics, chemicals, paper products, high

technology, and pharmaceuticals. The focus is on the efficiency of all compressor system elements, including compressors, auxiliaries, controls, distribution, end-use, and operation and maintenance.

In addition, this path will progressively create market conditions whereby independent businesses can build a sustainable market to address these opportunities. The expectation is that the market can be transformed to the point where utility incentives are not necessary for optimization of systems over 300 HP within a three-year period. Market transformation for smaller systems, and the ability to discontinue utility technical assistance, is a less certain outcome.

Financial incentives are provided for: a) the technical studies on a cost shared basis and b) for qualified equipment. As customer and contractor awareness and market demand build, the Program will adjust incentives for studies to maintain only levels necessary to produce desired levels of market response.

Energy Code Technical Support

To assist in customer and trade ally understanding of the requirements of the state's new commercial energy code, as well to build the technical foundations for possible future energy code upgrades (e.g., sharing of research results, program experience and technical support). This path is designed to "lock-in" efficiency gains from the program and to lay the groundwork for future market transformation.

New Jersey utilities have supported efforts to upgrade federal appliance efficiency standards and state building codes. Activities have included technical support, dissemination of information, sponsorship of conferences/workshops on codes and standards, tracking of activities and monitoring developments, and review and modification of program designs to integrate changes to the standards and codes. The Utilities will continue to support these activities.

The Utilities have filed letters with state and federal agencies in support of upgraded standards and codes. Individual utilities will consider specific efforts on a case-by-case basis, for future upgrades to standards or codes provided that such upgrades provide benefits to New Jersey consumers.

Direct Installation for Small Business in Urban Enterprise Zones (UEZ)

Many small businesses (under 100 kW) are both tenant occupied and have low energy consumption. There is little incentive for landlords to upgrade the energy efficiency of these buildings because the tenants pay utility costs. As a consequence, these customers often have outdated and inefficient energy systems. While energy use in each building is modest, there are thousands of these businesses in New Jersey. This program provides a simple path for these customers to reduce their energy use. Contractors will be selected by competitive solicitation to make direct marketing contacts to small businesses in Urban Enterprise Zones. These contractors will provide free audits to specify measures that they will then install on a turnkey basis. Energy savings (and quality control) are achieved through direct contractor installation of measures (primarily efficient lighting, but also efficiency improvements for walk-in case coolers and other items). As contractors will be guaranteed a set number of installations, cost savings

are achieved through the potential for bulk-purchases from equipment suppliers. This program track is available to small businesses located within the service territories of JCP&L and PSE&G.

Regional Program Participation

The New Jersey utilities have supported regional efforts that promote energy efficiency and market transformation for targeted equipment markets. These efforts include participation in the regional, MotorUp program and Cool Choice program. NJ utilities may consider continued participation in these programs after 2003 provided that the programs are beneficial to NJ consumers and continue to support NJ market transformation goals. Alternatively, the utilities agree to develop independent statewide programs in these areas.

Customer Incentive Schedules

The statewide incentives in the tables below vary by size, type and efficiency.

Design Support Incentives:	
Pre-design planning session -	Up to \$1,000.00
Design simulation and screening -	Up to \$5,000.00 or more depending on the size of the building, or service may be provided by utility
Incorporation of energy-efficiency measures into the Final Design-	Up to \$5,000.00 depending on the measures included
Multiple Measure Bonus -	Up to 10% above the incentive for all measures
Custom Measure Incentives:	
Measures not covered by the prescriptive incentive tables -	Up to 80% of qualifying measure's incremental cost or a buy down to a 1.5 year payback, whichever is less
Qualifying Equipment Incentives (no measure incentive shall exceed the cost of the measure):	
Electric Chillers:	
Water Cooled Chillers -	Up to \$12 - \$170 per ton depending on size and efficiency
Air Cooled Chillers -	Up to \$8 - \$62 per ton depending on size and efficiency
Natural Gas Chillers:	
Gas Absorption Chillers -	Up to \$185 - \$450 per ton depending on size, type and efficiency
Gas Engine Driven Chillers -	Treated under Custom measure path
Desiccant Systems -	Up to \$1.00 per cfm (gas or electric)
Unitary HVAC Systems -	Follows the Regional Cool Choice Program Incentive Schedule
Unitary AC and Split Systems -	Follows the Regional Cool Choice Program Incentive Schedule
Air to Air Heat Pumps -	Follows the Regional Cool Choice

	Program Incentive Schedule
Water Source Heat Pumps -	Follows the Regional Cool Choice Program Incentive Schedule
Packaged Terminal AC & HP -	Up to \$65 per ton
Dual enthalpy Economizers -	Follows the Regional Cool Choice Program Incentive Schedule
Geo-Thermal Heat Pumps:	
Open Loop & Closed Loop -	Up to \$70 per ton
Central DX AC Systems -	Up to \$40 - \$72 per ton
Gas Fired Boilers - <300mbh	Up to \$2.00 per mbh depending on efficiency but not less than \$300 per unit
Gas Fired Boilers - 300mbh - 1500mbh	Up to \$1.75 per mbh depending on efficiency
Gas Fired Boilers - >1500mbh - 4000mbh	Up to \$1.00 per mbh depending on efficiency
Gas Fired Boilers - > 4000mbh	Treated under Custom Measure Path
Gas Furnaces -	Up to \$300 per furnace depending on efficiency
Variable Frequency Drives (HVAC):	
Variable Air Volume - (add on to existing HVAC systems only)	Up to \$65 - \$155 per hp
Chilled Water Pumps -	Up to \$60 per ton
Gas Fired Water Heating:	
Gas Water Heaters - <= 50 gallon	Up to \$50 per water heater
Gas Water Heater - >50 gallon <300 mbh -	Up to \$2.00 per mbh, but not less than \$50/unit
300mbh - 1500 mbh -	Up to \$1.75 per mbh
>1500 mbh - 4000 mbh -	Up to \$1.00 per mbh
Gas Fired Water Booster Heaters -	Up to \$17 - \$35 per MBTUH
Premium Efficiency Motors:	
Three phase motors -	Follows the Regional MotorUp Program Incentive Schedule
Lighting:	
T-8 lamps with electronic ballast* -	Up to \$15 per fixture
LED Exit Signs* - (New Fixtures Only)	Up to \$20 per fixture
Hard-wired compact fluorescent surface mount fixtures* - (New Fixtures Only)	Up to \$15 per 1 lamp fixture Up to \$20 per 2 or more lamp fixture
Hard-wired compact fluorescent recessed fixtures* - (New Fixtures Only)	Up to \$25 per 1 lamp fixture Up to \$30 per 2 lamp or more fixture
Metal Halide w/ pulse start **-	Up to \$50 per fixture
T-5 High Bay Fixtures**	Up to \$ 75 per fixture
LED Traffic Signal lamps (existing	Up to \$20 per 8" lamp (red & green

intersections only)	only) Up to \$35 per 12" lamp (red & green only)
LED Walk Sign lamps (existing intersections only)	Up to \$20 per 8" lamp (red & green only)
Lighting Controls:	
Occupancy Sensors (Turning fixtures off in existing facilities only)	
Wall mounted -	Up to \$20 per control
Remote mounted (e.g., ceiling) -	Up to \$35 per control
Day lighting Dimmers - All facilities	
Fluorescent Fixtures	Up to \$25 per ballast controlled
HID controls	Up to \$75 per ballast controlled
Hi-Low controls - All facilities	
Fluorescent Fixtures	Up to \$25 per ballast controlled
HID	Up to \$75 per ballast controlled
Performance Based Lighting	
Performance Based Lighting incentives for indoor and outdoor installations (attached to building) -New construction and Major Renovation	Up to \$1.00 per watt-per-square foot below baseline which is 20% below (more efficient) code; incentive cap up to \$25/Fixture
Performance Based Lighting incentives for indoor/outdoor installations (attached to building) - Existing construction	Up to \$ 1.00 per watt-per-square foot below baseline which is 10% below (more efficient) code; incentive cap up to \$25/Fixture

* Available to existing facilities of small Commercial Customers
(<=75 kW average metered demand for a recent 12 month period)

** Certain Conditions May Apply, (check with the utility for specific application)

Joint/Coordinated Program Development and Delivery

All electric and gas utilities will continue to coordinate detailed program refinement and implementation of the consistent program design. The utilities will continue to maintain identical program eligibility requirements, equipment baselines and efficiency standards, and incentive levels, for both the core program offerings and the specialized program paths. The utilities also coordinate budget development funds allocation at the program level and may develop maximum budgetary allocations at the subprogram or sub-market level in order to preserve an equitable opportunity for all customers to participate in the program.

The utilities will propose adjustments to these offerings based on program experience, the results of various evaluations, program and market studies as well as other state/regional market research, and current pilot/demonstration projects. In addition, the utilities will update and implement their coordinated marketing strategy.

In order to maintain close coordination on an on going basis the Utilities formed a Standing Technical Committee, which develops and updates the program rules and the eligibility requirements governing measure eligibility and technical requirements. Changes to the program are posted and regularly updated on the New Jersey Smart Start Building web site and communicated to Trade Allies and program participants via the web site.

2003 Planned Program Activities

- By September 1, 2003, prepare 2004 Marketing and Action Plans for the entire C&I Program, including sections for already identified discrete markets (such as school/public buildings and small commercial customers), as well as any other markets identified in the scheduled market segmentation study.
- By June 30, 2003 conduct 12 information sessions to introduce Design Lighting concepts and techniques to electrical contractors, distributors and specifiers.
- By September 30, 2003 conduct 6 Design Lighting roundtable sessions to explore case study design guides.
- By December 31, 2003 complete 12 Design Lighting demonstration projects.
- By May 1, 2003, work with the New Jersey Department of Community Affairs (DCA) to schedule two (2) one-day workshops on the new Energy sub-code, ASHRAE Standard 90.1-1999, part of the NJ Uniform Construction Code.
- By June 1, 2003 develop a plan to assist DCA in developing, publicizing, administering, and enforcing the “System Commissioning” provisions in the ASHRAE Standard 90.1-1999, in a consistent manner, on all qualifying projects.
- By February 1, 2003 develop a plan to provide targeted and specialized assistance to the K-12 NJ Schools sector, including both Abbott and non-Abbott school districts. This will include completion of a study to illustrate how design teams can be offered additional incentives, under the program, for the incremental work necessary to incorporate optimal energy efficiency levels that exceed current ASHRAE standards and codes.
- By February 1, 2003 complete redesign of the program website to accommodate a separate access for information on schools.
- Each utility will have a “single point of contact for K-12 schools in NJ” with contact information listed on the Schools web page.

Performance Indicators

The following criteria may be used to judge performance based on program tracking and evaluation results:

- Additional specific actions to transform markets.
- Market share improvements for energy efficient equipment and practices.
- Market awareness.
- Number of comprehensive/multi-measure projects.
- Indicators of transformation of specific markets for energy efficient equipment and practices.

2003 Program Goals

- Collectively process through completion at least 1902 total New Jersey SmartStart Buildings Program applications.
- Collectively process through completion at least 184 Multiple Measure Projects.

- Collectively process through completion or commitment at least 42 Comprehensive projects.
- Collectively achieve the cited participation levels for the following program paths:
 - Tier 2 unitary HVAC installations completed: 415
 - Chiller optimization projects completed or committed: 8
- Collectively achieve 12 lighting remodel projects.
- Collectively achieve the following electric energy savings: 85,500 Megawatt-hours.
- Collectively achieve the following gas utility energy savings: 380,248 Therms.
- Complete 10 compressed air audits/studies.
- Complete 8 compressed air projects.

Minimum Requirements for Program Administration

- Collectively implement all elements of the program in a consistent and timely manner across the entire state.
- Collectively meet at least 50% of the utilities' agreed-upon statewide MWh savings and Therm goals.
- Continued support for upgrades to federal efficiency standards and state building codes.
- Individually achieve the minimum requirements cited below in the following program elements:

	PSE&G Elect	GPU	Conectiv	RECO	PSE&G Gas	E-Town	SJG	NJNG
SSB Program Applications: **	300	117	67	40	100	14	11	10
Comprehensive Projects:*	8	9	5	0	Incl in electric	1	1	1
Multiple Measure Projects**	38	34	20	0	Incl in electric	2	2	1
Tier-2 HVAC units**	120	65	23	0	-	-	-	-
Chiller optimization projects:*	2	2	1	0				

*Includes completed and committed projects that are submitted on NJSSB forms only.

**Completed projects.

New Jersey Clean Energy Collaborative 2003 Program Plan

C&I Building Operation & Maintenance

Overview

This program is proposed to be suspended.

This program is currently offered and supported by all of the utilities. The goal is to create sustainable, market-driven improvements in the resource efficiency of operation and maintenance practices in existing commercial buildings and industrial facilities served by the New Jersey utilities. The objectives of the Program are to build market awareness and demand for resource efficient building O&M practices, build the capability for the implementation of such practices, and increase the use of resource efficient O&M in buildings.

Market barriers which this Program addresses include: 1) limited customer awareness of the benefits of resource-efficient O&M, 2) limited customer data to track energy costs, 3) limited customer management attention to these issues, 4) absence of efficiency in most O&M service contracts, 5) lack of clear standards for O&M-related products and services which improve efficiency, 6) internal structural and financial issues within customer organizations, and 7) the immature developmental state of some products to help achieve building O&M.

The Program employs the following strategies to address these barriers:

- Tests of a variety of market intervention initiatives with the potential to help customers increase the resource efficiency of their O&M activities in buildings. (Conditioned on the results of these tests, one or more O&M programs will be developed in the future.).
- Continuation of an ongoing program for building operator training and certification in resource efficient O&M practices.

The Program strategy is designed to progressively raise the baseline of building operator capability, O&M activities, and the market demand for resource efficient O&M services. As these practices become common practice and independent, and as third parties assume technical assistance/services in response to Program-generated market demand, utility support will be ramped-down or shifted to other promising Programs.

In 2002, the utilities offered a building operator certification course designed to progressively raise the baseline of building operator capability, O&M activities, and the market demand for resource efficient O&M services. The building operator training and certification program is delivered through a statewide plan. All electric and gas utilities will participate in its planning and funding.

Target Markets/Eligibility

This initiative targets commercial and industrial customers with existing buildings and facilities, including schools and institutions. Measures include simple operational changes (e.g., reprogram thermostats, turn-off lights), reprogramming equipment, changes in maintenance procedures, low cost or no cost hardware enhancements, and periodic analysis and readjustment of controls systems.

Program Offerings and Customer Incentives

The initiative administers a delivery of a building operator training and certification program in the state. By building a cadre of aware and trained building operators, the program lays the groundwork for future O&M initiatives and helps building owners and managers recognize the value of good building O&M practices. During 2003, the utilities plan to continue the course sessions that began in 2002. In addition, the Program will continue to test other market intervention approaches and tools to increase the resource-efficiency of O&M through pilot projects. These projects will be developed based on the results of the ongoing pilot program results and market research. One such intervention utilizes the One-2-Five Energy Program. The One-2-Five Energy Program is a management tool to help customers evaluate energy related issues and make business related decisions involving energy projects. It provides a current assessment of the customer's energy practices and benchmarking against others in their industry. The diagnostic study uncovers critical issues and develops action items that the customer can monitor for progress toward meeting their energy objectives. A few of the 10 key management areas explored with the customer include: Financial management, supply management, operations and maintenance, plant and equipment, and planning. The One-2-Five product is being used by many utilities across the country and is also an element in the EPA's Energy Star Buildings program. During 2002 the utilities will have completed approximately 50 studies with customers. During 2003, the utilities will use the individual results of these studies to encourage customers to move forward with project implementation. In addition, the action items and critical issues across all diagnostic studies will be evaluated to determine if there is a common thread across many customer segments. If there are certain, key common issues, which lend themselves to broader implementation, specific offerings will be developed.

Examples of some early results from the One-2-Five program studies indicate customers need tools to help with setting energy use targets, understanding how energy impacts the business, monitoring energy usage and ways to document operational efficiency gains. Program incentives will be designed based on the needs of each market.

Joint/Coordinated Program Development and Delivery

Coordination of market intervention initiatives will be determined based on the needs and merits of each initiative. Gas utilities are encouraged to team up with electric utilities or each other for their pilot initiative.

2003 Planned Program Activities

The current program will be suspended in 2003, upon NJBPU approval. If the program is not suspended, it will be incorporated into the Commercial / Industrial Efficient Construction Program, also known as “New Jersey SmartStart Buildings®”.

2003 Program Goals

There are no established goals for 2003, as the program is to be suspended.

Performance Indicators

None, as the program is to be suspended.

Minimum Requirements for Program Administration

None, as the program is to be suspended.

New Jersey Clean Energy Collaborative 2003 Program Plan

Residential Air Conditioning Cycling Load Control Program

Overview

Through the Residential Air Conditioning Cycling Load Control Program, certain utilities (i.e., JCP&L, PSE&G, and Conectiv) will continue to use air conditioner cycling strategies to provide capacity relief on days of system peak. By using radio-activated relays, system operators will selectively cycle air conditioning equipment through a variety of operating strategies, which are designed to optimize system load and lower the peak demand while minimizing the impact on the customer. The short duration of such load cycling periods (generally fifteen (15) minutes of each half-hour when activated) minimizes the impact of the cycling on the customer's comfort.

In the PSE&G program, radio receiver switches were installed on more than 141,315 central air conditioners, heat pumps (or in the thermostats which control them), and qualifying water heaters (when accompanied by a central air conditioner or heat pump).

JCP&L has been offering this service to eligible customers since 1992 and to date has over 66,000 outdoor units installed and over 18,600 thermostat load control receivers installed under DSM programs.

Conectiv has over 21,000 active participants in the program and has installed radio receiver switches on more than 29,000 central air conditioners, heat pumps, and water heaters.

The utilities agree that load control programs may be maintained up to the above levels under the CRA.

Target Market/Eligibility

In the April 9, 2001 Compliance Filing, PSE&G noted that there were more than 141,315 central air conditioners, heat pumps and qualifying water heaters with radio receiver switches. PSE&G will not expand the program beyond that number but will continue to operate the program with existing participants and will focus on retaining those customers in the program. New participants will be added only to the extent that it is necessary to maintain the current level of system peak demand relief. The program is targeted to all customers who have central air-conditioning.

For JCP&L the program targets residential customers in the JCP&L New Jersey southern area service territory, who have central air conditioners and/or central heat pumps. New participants may be added each year only to the extent that it is necessary to maintain the current level of system peak demand relief.

For Conectiv the program is currently in maintenance mode, and is closed to new participants.

Eligible Measures

PSE&G - This program installs radio receiver on/off switches on central air conditioners, heat pumps and electric water heaters.

JCP&L - JCP&L, at no charge, will install a radio receiver switch in the form of a programmable thermostat in each participant's home.

Conectiv - New installations are not allowed.

Customer Incentives

PSE&G - Program participants will receive \$6.00 a month for each of the four summer months (June-September) in each year that they participate, regardless of how often their central air conditioners/electric heat pumps are cycled.

JCP&L - If it becomes necessary to enroll new program participants to replace others that drop out of the program, JCP&L will offer a programmable thermostat for either their air conditioner or heat pump as an incentive. Customers previously enrolled in the program and who have an outdoor control device will receive an incentive payment of \$24.00 for each cooling season. Customers participating in this program will receive an additional \$24.00 annual incentive payment if they elect to allow JCP&L to also cycle their electric water heater, provided they remain a program participant. Customers with outdoor control devices that fail will be offered a replacement outdoor control device, not a thermostat.

Conectiv - Residential customers receive \$1.50 credit per appliance and the commercial and industrial participants (accounts) receive a \$1.50 credit for each KW of controlled load. The credits are provided to participants in the months of June, July, August and September. When there is a cycling period, the participants receive an additional \$1.50 credit for that cycle period.

Joint/Coordinated Delivery

There will be no joint or coordinated delivery. The utilities will each operate their own programs.

2002 Timeline/Transition Plan

Initiatives generally represent a continuation of previously approved service offerings. Therefore, no transition plan is required.

Evaluation

JCP&L will review data collected in 2002, and update, if appropriate, the impact evaluation of its program in 2003.

New Jersey Clean Energy Collaborative 2003 Program Plan

School Energy Efficiency and Renewable Energy Education Program

Transition Plan

PSE&G and JCP&L are proposing to drop their respective programs for 2003. However, there may be continuing obligations that were made in 2002 for delivery within the school year that ends in June 2003. PSE&G and JCP&L intend to honor these obligations, which are reflected in the program budgets.

New Jersey Clean Energy Collaborative 2003 Program Plan

Customer-Sited Clean Energy Generation Program

“New Jersey Clean Energy Program”

Overview

PSE&G, Jersey Central Power and Light Company, Conectiv Power Delivery, Rockland Electric Company, New Jersey Natural Gas, South Jersey Gas and NUI Elizabethtown Gas (the utilities) will coordinate administration of a statewide Customer-Sited Clean Energy Generation (CSCG) program, also known as the New Jersey Clean Energy Program (NJCEP), to promote renewable projects sited on the customer side of the meter. The program will provide a coordinated set of market intervention strategies to help overcome market barriers and encourage the transition towards self-sustaining markets. Based on the findings of the Comprehensive Resource Analysis Market Assessment,⁷ rooftop solar electric (photovoltaic, PV) systems and fuel cells were identified as the technologies with the broadest technical and economic potential for customer-sited distributed generation development in the early years of this program. Small wind systems may have technical and economic potential as well and some participation may be expected from sustainable biomass facilities. Program participation since the April 9, 2001 start of the program has come primarily from residential and commercial solar electric systems with a small number of commercial fuel cells and sustainable biomass projects, a few small wind generator systems and one large wind system. In 2003 direct financial incentives will be limited to these four technologies. The program's activities will address market barriers common to these technologies, while adopting specific market interventions in recognition of important differences in current levels of market preparation and commercialization.

While 2001 was a developmental year for the Program with a successful focus on hiring a training and certification contractor, a quality assurance contractor, and the development of a marketing plan, 2002 was a year of program growth with an increased focus on consumer awareness and marketing activities to support sales. The 2003 program design incorporates the learnings from 2002 program experience and input from industry participants, the NJBPU staff, and the Ratepayer Advocate.

Goals and Objectives

The goals of this program are to promote market conditioning, development, and transformation. The program is expected to significantly increase demand, due to a combination of direct program and market effect impacts. The increased demand is expected to catalyze market forces that will drive additional growth in consumer demand and bring prices down. This pattern is seen in the market development of many emerging technologies. The New Jersey Clean Energy Program will decrease direct incentive levels and other forms of market support as indicators of sustainable market development emerge.

⁷ New Jersey Comprehensive Resources Analysis Market Assessment. See Joint Filing, UTIL-CRA-1: Statewide Market Assessment. Appendix R1: Renewable Distributed Generation.

Target Markets

The program's target market is composed of customers (residential, commercial, and public entities) who are interested in and able to invest in customer-sited clean energy generation, primarily motivated by environmental or power reliability concerns. While the program's outreach and broad marketing will aim to educate the general public about customer-sited clean energy technologies, the majority of participation is expected to be generated from more focused target marketing to these niche markets. The target markets can be further distinguished by system size, new construction versus retrofit, and generation technology. It is also envisioned that utilities may use this program in combination with other incentives in order to target areas of the transmission and distribution system in which distributed generation is of particular value.

Small-Sized Renewable Systems (Rated 10 kW or less)

For small renewable systems the target markets are residential and small commercial retrofit and new construction customers, and the decision-makers that influence their buying decision. These include builders, architects, home improvement contractors, lenders, Realtors, and electricians. During 2001-2002 solar electric and a few small wind systems constituted all of the program participation in these market segments. It is anticipated that solar electric and small wind systems will continue to provide most of the program participation during 2003. Customer-sited fuel cells are the next most likely technology to become market-ready with potentially broad participation. A 0.5 kW hydrogen powered fuel cell is now available and will be eligible for program participation, but due to the high initial cost of the system additional market development support may be needed to encourage market acceptance of this technology.

Medium-Large Sized Renewable Systems (greater than 10 kW)

For medium-large sized clean energy systems the target market is composed of medium and large commercial customers and the market actors who influence their decision-making, including designers, architects, service contractors, engineers, and lenders. The target market will include customers seeking to promote clean energy due to public interest benefits, environmental concerns, or for reliability and back-up power benefits. Solar electric systems are expected to represent the majority of projects in this size class, although site-specific conditions may permit the development of suitable wind or biomass facilities.

Customer-sited fuel cell technologies in the 200-250 kW range are commercially available and participated equally in the program until April 2002 when the NJBPU ordered a moratorium on support for fuel cells using natural gas as a hydrogen source. While fuel cells utilizing hydrogen from renewable sources continue to be eligible, to date no applications have been received for fuel cells using methane or other renewable fuel sources. In order to utilize landfill gas as a hydrogen source for fuel cells, a gas clean-up system is required to remove CO₂ and volatile organic compounds from the methane so that it will not corrode the fuel cell. This adds significantly to the total system cost.

Implementation

Program Strategies

Target Marketing/General Outreach and Education

The utilities will conduct a coordinated outreach and education effort to raise awareness and knowledge concerning the availability and benefits of customer-sited clean energy technologies. The utilities will continue to develop materials and use multiple delivery channels to provide high quality information on how clean energy systems work, their costs and benefits, and to raise the level of understanding of the relationship between electricity generation and the environment.

During 2002 the utilities conducted targeted marketing campaigns to increase demand for clean energy systems and to meet the program goals for new program applications and rebated systems. Direct mail proved effective in identifying residential customers interested in solar electric systems. In 2003, targeted marketing activities will include monthly public information sessions on solar electric technology. Also, a Senior Energy Consultant has been retained to specifically provide outreach and education on the implementation of clean energy systems to municipalities, commercial customers, and trade allies. Other marketing activities may include direct mail, trade shows, promotions, co-op marketing, seminars, conferences, and other media as appropriate. Demonstration projects may also be initiated to help seed the market and increase awareness of the technology.

Market Facilitation

This component of the program will include activities designed to reduce specific market barriers to distributed small and medium sized clean energy technologies. The program development activities include:

- Providing technical assistance, grants, and vendor linkages, particularly early in the program when technical assistance, products, and services will be most difficult for customers to identify on their own.
- Providing technical training for utility engineers, municipal electrical inspectors, electrical contractors, and other appropriate trades.
- Coordinating activities for consistent implementation of interconnection rules adopted by the BPU.
- Identifying opportunities to develop demonstration projects that will help seed the market and increase awareness of the various technologies.

Incentives

The program will offer direct financial incentives to reduce the initial cost for the first 1,000 kW of systems, including installation and interconnection costs. Incentives will decrease over time, as the number of installed megawatts (MW) increases. The total incentive value will be capped according to both the percent of total installed cost and on a dollar per installed watt basis. Customers will receive the lesser of these two values.

Direct financing of residential systems has been considered and will not be pursued in 2003. A financing option for residential systems would need to replace or offset direct incentives. As an

alternative, higher direct incentives for residential systems are proposed which lowers the need for financing. Financing for residential systems will be reconsidered annually.

During 2002 three issues that impact the marketing effectiveness of the program were identified:

- 1) A need for incentive predictability to facilitate vendors in working with commercial customers. This need will be addressed by establishing annual incentive levels and budgets. The incentive levels and budget will be determined by the available capacity, but vendors will be able to track projects against a pre-defined dollar amount and will be able to inform their potential customers of the exact amount of funding available for the year.
- 2) Low level of small system installation activity. Direct marketing during 2002 identified a large number of residential households interested in solar electric systems, but adoption of the technology continued at very low levels. To ensure that funding will be available for the small systems market, one-half of the program capacity will continue to be reserved for small systems.
- 3) The need for different incentive levels among the four clean energy technologies. Since the eligible technologies varied widely in their total costs and the level of incentive needed to make them economically attractive to potential customers, it was determined that the incentive structure should be differentiated by technology.

During the 2001 and 2002 program years there was a soft cap for both small systems and medium-large systems that limited any one technology from obtaining more than 50% of the capacity available in any capacity block. In 2002 in response to market forces and in consultation with the NJBPU, the split between small and medium/large systems was modified. As indicated in the table below, over the life of the program, 25 MW of capacity is reserved for small systems (≤ 10 kW) and 26.23 MW of capacity is reserved for medium-large systems.

System Size	Capacity
Small (≤ 10 kW)	25 MW
Medium/Large (> 10 kW)	26.23 MW

The slightly larger capacity allocation for medium-large system sizes reflects the large volume of program activity that took place in December 2001.

Over the life of the New Jersey Clean Energy Program the small/medium-large soft cap will be honored, but in order to maintain market momentum, medium-large sized systems will utilize a larger percentage of their allotted capacity in the early program years. Since 2001-2002 participation by small systems totaled about 200 kW, it is expected that new small system participation will not exceed 350 kW of capacity or 20% of the incentive funding for new projects (approximately \$2 million) during 2003. Since the small systems market will take longer to gather momentum and will develop over a longer period of time, a higher level incentive will be offered in 2003.

In order to balance the dual needs of maintaining market momentum and reserving sufficient capacity for slower developing markets, it may be appropriate during the program year, based on

program results and pursuant to consultation with Board staff, to modify the maximum buy-down percentage, dollar-per-watt incentive tiers for a particular technology or sub-category of technologies, and the capacity allocation by project size.

The proposed levels for 2003 incentives are set forth in the following tables.

Small Projects (up to 10 kW)

NJCEP Incentives	2003 Incentives for Small Systems (<=10kW)
Maximum buy-down per watt of system rated output	\$5.50/watt
Maximum buy-down as a percentage of eligible system costs	70%

Medium-Large Projects (greater than 10 kW)

NJCEP Incentives	Solar Electric, Fuel Cells (Renewable Fuel Source)	Fuel Cells (Bridge Technology / Natural Gas)	Wind, Sustainable Biomass
Maximum buy-down per watt of system rated output			
Tier I (<=10kW)	\$5.50/watt	\$4.00/watt	\$3.00/watt
Tier II (>10-100 kW)	\$4.00/watt	\$3.00/watt	\$2.00/watt
Tier III (>100-500 kW)	\$3.00/watt	\$2.00/watt	\$1.50/watt
Tier IV (>500- 1,000 kW)	\$0.30/watt	\$0.20/watt	\$0.15/watt
Maximum buy-down as a percentage of eligible system costs	50%	40%	30%

Incentive calculations will be based on system rated output in AC watts. System rated output will be calculated for the different technologies based on power rating of equipment and maximum inverter efficiencies and output.

For medium-large systems, the highest dollar incentive level (Tier I) is for the first 10 kW of capacity. The second dollar incentive level (Tier II) is for the next 90 kW of capacity. The third dollar incentive level (Tier III) is for the next 400 kW of capacity, and the final dollar incentive level (Tier IV) is for every kW of capacity installed over 500 kW up to 1,000 kW. See the following example.

Example: Rebate calculation for an eligible solar electric system, with a system rated output of 150 kW

0-10 kW rebate calculated at \$ 5.50/ watt	\$ 5.50 * 10,000 watts =	\$ 55,000
11-100 kW rebate calculated at \$ 4.00/watt	\$ 4.00 * 90,000 watts =	\$360,000
101-150 kW rebate calculated at \$ 3.00/watt	\$ 3.00 * 50,000 watts =	<u>\$150,000</u>
	Total Incentive	\$565,000

As the market transforms the incentive amount, in total dollars and as percentage of first cost, will decrease and the amount of the customer's contribution will increase. The key features of the customer-sited clean energy incentive are:

- The incentive is a rebate of a portion of the total system cost, including installation and interconnection.
- The incentive is paid to retailer, lender, or purchaser.
- Incentive per watt funding levels and percent caps will decline over time, as the market transforms.

Eligible Technologies

Technologies eligible for this program are fuel cells, solar electric, small wind, and sustainable biomass. Support for fuel cells will be determined by the source of the hydrogen required to power the fuel cell. Fuel cells running on direct hydrogen or hydrogen derived from a renewable fuel source will be eligible for the highest level of incentives. Fuel cells deriving their hydrogen fuel from natural gas will be eligible for a lower level of incentives for a transition period of time through 2005. This incentive will decline annually during this transition period. Since natural gas is currently the most readily available and economic source of hydrogen, commercially available fuel cells rely on natural gas as a bridge fuel to sustain the industry until a hydrogen infrastructure is developed and deployed. Fuel cell power plants will ultimately rely on hydrogen, but without continued financial incentives to help customers afford fuel cells operating on natural gas, hydrogen fuel cells may not develop.

Although there is no size-limit in terms of maximum capacity, installations must be sized to meet customer loads by adhering to the following criteria:

- Clean energy generation systems will be sized to produce no more than 125% of annual energy consumption levels for non-demand metered customers.
- Clean energy generation systems will be sized no greater than 100% of maximum billing demand or sized to produce no more than 100% of annual energy consumption levels for demand metered customers.
- Clean energy generation systems designed for new construction will be sized based on estimated loads.

Installations sized to provide net supply to the grid are not eligible for this program and must compete for financial incentives through the grid-supply or market development programs. Projects that apply for funding under both the Grid-Supply program and the New Jersey Clean Energy Program will be subject to BPU review.

In addition, financial incentives under this program are applicable only for:

- New components.
- Systems located on customer premises in New Jersey.
- Systems that include at least a 5-year all-inclusive warranty, with the exception of fuel cell stacks, for which warranties against normal decline in output should not be required.
- Products that meet minimum program requirements.

Participation Requirements

- The consumer or retailer must submit a New Jersey Clean Energy Program Pre-Installation Application Form and a Technical Worksheet for the appropriate renewable technology and the program administrator must grant approval prior to installation.
- The Application must include information demonstrating that the system meets all applicable technical and certification requirements.
- Systems must be installed within 6 months of application approval date for small ($\leq 10\text{kW}$) systems, within 12 months for medium-large (greater than 10 kW) systems, and within a mutually agreeable time period for public projects.
- Program administrators will inspect 100% of installations with rebate reservations and applicants must permit the inspection prior to the issuance of any incentive from the utilities. The percentage inspected will decrease over time.
- Rebates will be awarded on a first come/first served basis on the basis of application approval date.
- Applicants must pay for all interconnection costs required by the interconnection standards approved by the Board (other than the portion covered by rebate).
- Projects must be installed in New Jersey at sites that are customers of one of the seven utility administrators.
- Medium-large systems ($>10\text{kW}$) that receive a rebate reservation must provide a signed contract for the system installation within three months of receipt of the rebate reservation in order to retain the funding reservation.

Roles of Different Parties

Utilities

This program shall be administered as a single statewide program by the utilities. The utilities shall coordinate their activities to ensure that the same incentives, eligibility and incentive structure applies in all service territories as well as to achieve administrative efficiencies. The utilities will solicit input from interested parties on the program. As a group, the utilities will also work to coordinate the initiative with the appropriate state, regional and national efforts that support the development of clean energy technologies, markets, and industries for the benefit of New Jersey.

Trade Allies

Trade allies and installation contractors will sell individual systems and install and maintain the equipment. The program will develop and maintain rebate application forms and establish qualifications for installations. The program will offer solar electric system installation training

and certification (when available) for contractors that do not have installation experience to encourage development of the industry.

Competitive impact

The phased buy-down program is designed to provide sufficient incentive early on to attract customers and businesses. The size of the incentives will decline over time in order to require the market to be sustainable. This should create a robust competitive market and delivery infrastructure for these technologies over the course of the program.

Transition Strategies

As program activities successfully reduce market barriers, the type and size of interventions needed to create and maintain sustainable, orderly development for clean energy technologies will diminish. Over time, as clean energy manufacturers and installers capture economies of scale and consumer-financing products are developed and become more widely available, it should be possible to reduce or eliminate direct incentives. Similarly, as consumers, builders, and lenders become more familiar with and gain more experience with clean energy technologies, the need for technical assistance will be reduced. The long-term goal of this program is to help customer-sited clean energy markets develop to the point that continued market interventions are no longer necessary.

2003 Planned Program activities

Collectively the utilities will implement the following planned program activities for refinement and implementation of the program:

- Develop a 2003 tactical marketing plan by February 15, 2003.
- Complete Evaluation activities identified in Evaluation Plan by the revised dates. Continue the evaluation activities that were started in March 2002, but placed on hold in July 2002 pending NJBPU review. These include tracking and process evaluations, market progress reports, and an impact evaluation of installed systems.
- Update the marketing plan based on experience from 2002 by March 30th. Incorporate results of evaluation activities when available.
- Conduct four to six solar electric system installer training courses with testing opportunities offered in New Jersey during the calendar year. Installer certification will be offered in New Jersey when the national standards are finalized.
- Sponsor and actively participate in one or more Renewable Energy Conference/Workshops during the calendar year.
- Coordinate with the Residential New Construction program to begin the penetration of solar electric installations in the new home construction market.

Performance Indicators

The ability to complete the activities identified above will be one measure of each utility's performance. Program administrators should also be required to demonstrate measurable results and momentum towards the long-term development of the customer-sited clean energy markets. The market indicators that may be used to measure this progress include:

- Increase in public awareness and consumer knowledge of small scale clean energy technologies.
- Customer satisfaction with clean energy systems installed and the New Jersey Clean Energy Program.
- The number of firms installing systems that qualify for incentives.
- The number and variety of customer-sited clean energy systems eligible for program incentives and readily available in the New Jersey market.
- Decreases in the first costs for customer-sited clean generation systems.

2003 Program Goals

2001 provided limited experience to draw upon in order to set goals for 2002. The 2003 program goals were developed based upon actual program activity in 2002. The goals are:

- Receive and approve 120 applications for New Jersey Clean Energy Program systems during the calendar year.
- Provide rebates for 1,000 kW of installed capacity during the calendar year.
- Train fifty or more installers in 2003. Provide for an Installer Certification Test when the national standards are finalized.

Minimum Requirements for Program Administration

- Collectively implement elements of the program in a consistent manner across the entire state.
- Collectively employ best efforts to implement planned program activities in a timely manner.
- Collectively complete at least 60% of each of the three program goals.

**New Jersey Clean Energy Collaborative
2003 Program Plan
Program Budgets**

November 1, 2002

New Jersey Clean Energy Collaborative 2003 Budget

Statewide by Company

(All numbers = 000's)

	Total	Connectiv Power Delivery	JCP&L	PSE&G Electric	RECO	New Jersey Natural Gas	NUI Elizabethtown Gas	PSE&G Gas	South Jersey Gas
RESIDENTIAL ENERGY EFFICIENCY									
Residential HVAC - Electric	\$13,510	\$1,613	\$4,805	\$6,964	\$128	\$0	\$0	\$0	\$0
Residential HVAC - Gas	\$5,570	\$0	\$0	\$0	\$0	\$772	\$654	\$3,296	\$848
Residential ENERGY STAR Products	\$5,220	\$223	\$1,250	\$2,498	\$0	\$60	\$79	\$1,044	\$64
Residential Low Income	\$16,879	\$966	\$4,089	\$5,239	\$46	\$1,216	\$901	\$3,643	\$778
NJ ENERGY STAR Homes	\$17,398	\$2,517	\$4,333	\$4,135	\$155	\$1,241	\$533	\$3,787	\$697
Residential Retrofit	\$78	\$9	\$16	\$29	\$0	\$4	\$7	\$8	\$5
Sub-Total Residential	\$58,656	\$5,328	\$14,494	\$18,866	\$329	\$3,294	\$2,174	\$11,779	\$2,392
NONRESIDENTIAL ENERGY EFFICIENCY									
Commercial/Industrial Construction	\$34,777	\$3,699	\$11,806	\$15,435	\$280	\$513	\$903	\$1,568	\$573
Building Operation & Maintenance	\$22	\$5	\$4	\$8	\$0	\$0	\$0	\$5	\$0
Sub-Total Nonresidential	\$34,799	\$3,704	\$11,810	\$15,443	\$280	\$513	\$903	\$1,573	\$573
OTHER PROGRAMS									
Appliance Cycling	\$8,483	\$291	\$2,975	\$5,216	\$0	\$0	\$0	\$0	\$0
Schools EE&R Education	\$164	\$0	\$0	\$82	\$0	\$0	\$0	\$82	\$0
Sub-Total Other	\$8,647	\$291	\$2,975	\$5,298	\$0	\$0	\$0	\$82	
SUB-TOTAL Energy Efficiency Programs	\$102,101	\$9,323	\$29,279	\$39,607	\$609	\$3,807	\$3,077	\$13,434	\$2,966
RENEWABLE ENERGY PROGRAMS									
Customer Sited Clean Generation	\$32,399	\$5,138	\$5,617	\$11,332	\$107	\$2,133	\$2,516	\$4,632	\$924
BPU Grid-Supply/Market Development	\$15,515	\$1,429	\$4,367	\$5,423	\$67	\$527	\$527	\$2,736	\$439
Sub-Total Renewable Energy	\$47,913	\$6,567	\$9,984	\$16,755	\$174	\$2,660	\$3,043	\$7,368	\$1,363
Total Expenditures	\$150,015	\$15,890	\$39,263	\$56,362	\$783	\$6,467	\$6,120	\$20,802	\$4,329

New Jersey Clean Energy Collaborative 2003 Budget

Statewide by Cost Category

(All numbers = 000's)

	Total	Admin (Payroll, Overheads, facilities, legal, etc.)	Sales (Int or Contr)	Marketing & Promotions	Training	Market Research, Evaluation & Program Development	Direct Payments		Projected 2002 Performance Incentive
							Grants, Incentives, Arrears Reduction	Implemen. Contractors	
RESIDENTIAL ENERGY EFFICIENCY									
Residential HVAC - Electric	\$13,510	\$649	\$223	\$1,066	\$460	\$481	\$8,738	\$1,115	\$778
Residential HVAC - Gas	\$5,570	\$550	\$193	\$726	\$114	\$377	\$3,005	\$288	\$317
Residential ENERGY STAR Products	\$5,220	\$298	\$313	\$1,305	\$57	\$648	\$1,306	\$952	\$340
Residential Low Income	\$16,879	\$754	\$227	\$179	\$100	\$714	\$1,064	\$13,095	\$746
NJ ENERGY STAR Homes	\$17,398	\$580	\$789	\$1,432	\$142	\$546	\$9,450	\$3,813	\$646
Residential Retrofit	\$78	\$11	\$0	\$0	\$0	\$0	\$0	\$67	\$0
Sub-Total Residential	\$58,656	\$2,842	\$1,744	\$4,708	\$874	\$2,766	\$23,563	\$19,331	\$2,827
NONRESIDENTIAL ENERGY EFFICIENCY									
Commercial/Industrial Construction	\$34,777	\$984	\$1,613	\$1,294	\$119	\$1,602	\$24,031	\$3,848	\$1,286
Building Operation & Maintenance	\$22	\$0	\$0	\$0	\$0	\$0	\$0	\$22	\$0
Sub-Total Nonresidential	\$34,799	\$984	\$1,613	\$1,294	\$119	\$1,602	\$24,031	\$3,870	\$1,286
OTHER PROGRAMS									
Appliance Cycling	\$8,483	\$414	\$71	\$269	\$0	\$98	\$4,471	\$3,160	\$0
Schools EE&R Education	\$164	\$4	\$0	\$0	\$0	\$0	\$0	\$160	\$0
Sub-Total Other	\$8,647	\$418	\$71	\$269	\$0	\$98	\$4,471	\$3,320	
SUB-TOTAL Energy Efficiency Programs	\$102,101	\$4,245	\$3,428	\$6,271	\$993	\$4,467	\$52,064	\$26,521	\$4,113
RENEWABLE ENERGY PROGRAMS									
Customer Sited Clean Generation	\$32,399	\$646	\$302	\$1,707	\$337	\$881	\$28,178	\$349	\$0
BPU Grid-Supply/Market Development	\$15,515	\$0	\$0	\$0	\$0	\$0	\$15,515	\$0	\$0
Sub-Total Renewable Energy	\$47,913	\$646	\$302	\$1,707	\$337	\$881	\$43,692	\$349	\$0
Total Expenditures	\$150,015	\$4,890	\$3,730	\$7,978	\$1,330	\$5,348	\$95,756	\$26,870	\$4,113
							Direct Payments		
							\$122,626		

New Jersey Clean Energy Collaborative 2003 Budget

Company: Conectiv Power Delivery

(All numbers = 000's)

	Total	Admin (Payroll, Overheads, facilities, legal, etc.)	Sales (Int or Contr)	Marketing & Promotions	Training	Market Research, Evaluation & Program Development	Direct Payments		Projected 2002 Performance Incentive
							Grants, Incentives, Arrears Reduction	Implemen. Contractors	
RESIDENTIAL ENERGY EFFICIENCY									
Residential HVAC - Electric	\$1,613	\$75	\$5	\$38	\$60	\$20	\$1,189	\$144	\$82
Residential HVAC - Gas	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Residential ENERGY STAR Products	\$223	\$18	\$10	\$50	\$4	\$20	\$75	\$30	\$16
Residential Low Income	\$966	\$41	\$0	\$8	\$5	\$25	\$45	\$800	\$42
NJ ENERGY STAR Homes	\$2,517	\$82	\$0	\$60	\$5	\$20	\$1,729	\$570	\$51
Residential Retrofit	\$9	\$2	\$0	\$0	\$0	\$0	\$0	\$7	\$0
Sub-Total Residential	\$5,328	\$218	\$15	\$156	\$74	\$85	\$3,038	\$1,551	\$191
NONRESIDENTIAL ENERGY EFFICIENCY									
Commercial/Industrial Construction	\$3,699	\$180	\$40	\$75	\$15	\$111	\$2,600	\$550	\$128
Building Operation & Maintenance	\$5	\$0	\$0	\$0	\$0	\$0	\$0	\$5	\$0
Sub-Total Nonresidential	\$3,704	\$180	\$40	\$75	\$15	\$111	\$2,600	\$555	\$128
OTHER PROGRAMS									
Appliance Cycling	\$291	\$16	\$0	\$0	\$0	\$4	\$196	\$75	\$0
Schools EE&R Education	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sub-Total Other	\$291	\$16	\$0	\$0	\$0	\$4	\$196	\$75	
SUB-TOTAL Energy Efficiency Programs	\$9,323	\$414	\$55	\$231	\$89	\$200	\$5,834	\$2,181	\$318
RENEWABLE ENERGY PROGRAMS									
Customer Sited Clean Generation	\$5,138	\$45	\$0	\$25	\$14	\$85	\$4,744	\$225	\$0
BPU Grid-Supply/Market Development	\$1,429	\$0	\$0	\$0	\$0	\$0	\$1,429	\$0	\$0
Sub-Total Renewable Energy	\$6,567	\$45	\$0	\$25	\$14	\$85	\$6,173	\$225	\$0
Total Expenditures	\$15,890	\$459	\$55	\$256	\$103	\$285	\$12,007	\$2,406	\$318
							Direct Payments		
							\$14,413		

New Jersey Clean Energy Collaborative 2003 Budget

Company: JCP&L

(All numbers = 000's)

	Total	Admin (Payroll, Overheads, facilities, legal, etc.)	Sales (Int or Contr)	Marketing & Promotions	Training	Market Research, Evaluation & Program Development	Direct Payments		Projected 2002 Performance Incentive
							Grants, Incentives, Arrears Reduction	Implemen. Contractors	
RESIDENTIAL ENERGY EFFICIENCY									
Residential HVAC - Electric	\$4,805	\$181	\$48	\$328	\$159	\$88	\$3,265	\$453	\$284
Residential HVAC - Gas	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Residential ENERGY STAR Products	\$1,250	\$96	\$57	\$241	\$6	\$89	\$276	\$357	\$128
Residential Low Income	\$4,089	\$120	\$70	\$100	\$25	\$90	\$500	\$3,044	\$140
NJ ENERGY STAR Homes	\$4,333	\$93	\$218	\$368	\$36	\$73	\$2,466	\$965	\$115
Residential Retrofit	\$16	\$2	\$0	\$0	\$0	\$0	\$0	\$14	\$0
Sub-Total Residential	\$14,494	\$491	\$393	\$1,037	\$226	\$340	\$6,507	\$4,833	\$667
NONRESIDENTIAL ENERGY EFFICIENCY									
Commercial/Industrial Construction	\$11,806	\$372	\$440	\$343	\$38	\$282	\$8,322	\$1,648	\$361
Building Operation & Maintenance	\$4	\$0	\$0	\$0	\$0	\$0	\$0	\$4	\$0
Sub-Total Nonresidential	\$11,810	\$372	\$440	\$343	\$38	\$282	\$8,322	\$1,652	\$361
OTHER PROGRAMS									
Appliance Cycling	\$2,975	\$104	\$71	\$169	\$0	\$94	\$1,000	\$1,538	\$0
Schools EE&R Education	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sub-Total Other	\$2,975	\$104	\$71	\$169	\$0	\$94	\$1,000	\$1,538	
SUB-TOTAL Energy Efficiency Programs	\$29,279	\$967	\$903	\$1,548	\$264	\$716	\$15,829	\$8,023	\$1,028
RENEWABLE ENERGY PROGRAMS									
Customer Sited Clean Generation	\$5,617	\$166	\$155	\$100	\$100	\$240	\$4,800	\$56	\$0
BPU Grid-Supply/Market Development	\$4,367	\$0	\$0	\$0	\$0	\$0	\$4,367	\$0	\$0
Sub-Total Renewable Energy	\$9,984	\$166	\$155	\$100	\$100	\$240	\$9,167	\$56	\$0
Total Expenditures	\$39,263	\$1,133	\$1,058	\$1,648	\$364	\$956	\$24,996	\$8,079	\$1,028
							Direct Payments		
							\$33,075		

New Jersey Clean Energy Collaborative 2003 Budget

Company: PSE&G Electric

(All numbers = 000's)

	Total	Admin (Payroll, Overheads, facilities, legal, etc.)	Sales (Int or Contr)	Marketing & Promotions	Training	Market Research, Evaluation & Program Development	Direct Payments		Projected 2002 Performance Incentive
							Grants, Incentives, Arrears Reduction	Implemen. Contractors	
RESIDENTIAL ENERGY EFFICIENCY									
Residential HVAC - Electric	\$6,964	\$386	\$170	\$700	\$240	\$363	\$4,204	\$500	\$402
Residential HVAC - Gas	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Residential ENERGY STAR Products	\$2,498	\$150	\$203	\$612	\$39	\$415	\$474	\$438	\$167
Residential Low Income	\$5,239	\$275	\$76	\$14	\$19	\$248	\$162	\$4,163	\$282
NJ ENERGY STAR Homes	\$4,135	\$150	\$265	\$435	\$40	\$250	\$2,100	\$635	\$260
Residential Retrofit	\$29	\$2	\$0	\$0	\$0	\$0	\$0	\$27	\$0
Sub-Total Residential	\$18,866	\$962	\$715	\$1,761	\$338	\$1,276	\$6,940	\$5,763	\$1,111
NONRESIDENTIAL ENERGY EFFICIENCY									
Commercial/Industrial Construction	\$15,435	\$272	\$954	\$601	\$32	\$997	\$10,314	\$1,644	\$620
Building Operation & Maintenance	\$8	\$0	\$0	\$0	\$0	\$0	\$0	\$8	\$0
Sub-Total Nonresidential	\$15,443	\$272	\$954	\$601	\$32	\$997	\$10,314	\$1,652	\$620
OTHER PROGRAMS									
Appliance Cycling	\$5,216	\$294	\$0	\$100	\$0	\$0	\$3,274	\$1,547	\$0
Schools EE&R Education	\$82	\$2	\$0	\$0	\$0	\$0	\$0	\$80	\$0
Sub-Total Other	\$5,298	\$296	\$0	\$100	\$0	\$0	\$3,274	\$1,627	
SUB-TOTAL Energy Efficiency Programs	\$39,607	\$1,531	\$1,669	\$2,462	\$370	\$2,273	\$20,528	\$9,043	\$1,731
RENEWABLE ENERGY PROGRAMS									
Customer Sited Clean Generation	\$11,332	\$215	\$115	\$901	\$157	\$298	\$9,597	\$50	\$0
BPU Grid-Supply/Market Development	\$5,423	\$0	\$0	\$0	\$0	\$0	\$5,423	\$0	\$0
Sub-Total Renewable Energy	\$16,755	\$215	\$115	\$901	\$157	\$298	\$15,020	\$50	\$0
Total Expenditures	\$56,362	\$1,746	\$1,784	\$3,363	\$527	\$2,571	\$35,548	\$9,093	\$1,731
							Direct Payments		
							\$44,640		

New Jersey Clean Energy Collaborative 2003 Budget

Company: RECO

(All numbers = 000's)

	Total	Admin (Payroll, Overheads, facilities, legal, etc.)	Sales (Int or Contr)	Marketing & Promotions	Training	Market Research, Evaluation & Program Development	Direct Payments		Projected 2002 Performance Incentive
							Grants, Incentives, Arrears Reduction	Implemen. Contractors	
RESIDENTIAL ENERGY EFFICIENCY									
Residential HVAC - Electric	\$128	\$8	\$0	\$1	\$1	\$10	\$79	\$18	\$11
Residential HVAC - Gas	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Residential ENERGY STAR Products	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Residential Low Income	\$46	\$3	\$0	\$1	\$0	\$7	\$25	\$6	\$4
NJ ENERGY STAR Homes	\$155	\$8	\$0	\$4	\$0	\$7	\$121	\$13	\$2
Residential Retrofit	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sub-Total Residential	\$329	\$19	\$0	\$6	\$1	\$24	\$225	\$37	\$17
NONRESIDENTIAL ENERGY EFFICIENCY									
Commercial/Industrial Construction	\$280	\$11	\$0	\$1	\$0	\$5	\$239	\$6	\$18
Building Operation & Maintenance	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sub-Total Nonresidential	\$280	\$11	\$0	\$1	\$0	\$5	\$239	\$6	\$18
OTHER PROGRAMS									
Appliance Cycling	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Schools EE&R Education	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sub-Total Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
SUB-TOTAL Energy Efficiency Programs	\$609	\$30	\$0	\$7	\$1	\$29	\$464	\$43	\$35
RENEWABLE ENERGY PROGRAMS									
Customer Sited Clean Generation	\$107	\$8	\$0	\$0	\$1	\$3	\$93	\$2	\$0
BPU Grid-Supply/Market Development	\$67	\$0	\$0	\$0	\$0	\$0	\$67	\$0	\$0
Sub-Total Renewable Energy	\$174	\$8	\$0	\$0	\$1	\$3	\$160	\$2	\$0
Total Expenditures	\$783	\$38	\$0	\$7	\$2	\$32	\$624	\$45	\$35
							Direct Payments		
							\$669		

New Jersey Clean Energy Collaborative 2003 Budget

Company: New Jersey Natural Gas

(All numbers = 000's)

	Total	Admin (Payroll, Overheads, facilities, legal, etc.)	Sales (Int or Contr)	Marketing & Promotions	Training	Market Research, Evaluation & Program Development	Direct Payments		Projected 2002 Performance Incentive
							Grants, Incentives, Arrears Reduction	Implemen. Contractors	
RESIDENTIAL ENERGY EFFICIENCY									
Residential HVAC - Electric	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Residential HVAC - Gas	\$772	\$66	\$18	\$58	\$4	\$34	\$543	\$0	\$49
Residential ENERGY STAR Products	\$60	\$6	\$5	\$23	\$3	\$8	\$0	\$15	\$0
Residential Low Income	\$1,216	\$49	\$16	\$7	\$0	\$63	\$113	\$924	\$44
NJ ENERGY STAR Homes	\$1,241	\$31	\$16	\$50	\$10	\$20	\$770	\$324	\$20
Residential Retrofit	\$4	\$2	\$0	\$0	\$0	\$0	\$0	\$2	\$0
Sub-Total Residential	\$3,294	\$154	\$55	\$138	\$17	\$125	\$1,426	\$1,265	\$113
NONRESIDENTIAL ENERGY EFFICIENCY									
Commercial/Industrial Construction	\$513	\$31	\$46	\$24	\$0	\$37	\$350	\$0	\$25
Building Operation & Maintenance	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sub-Total Nonresidential	\$513	\$31	\$46	\$24	\$0	\$37	\$350	\$0	\$25
OTHER PROGRAMS									
Appliance Cycling	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Schools EE&R Education	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sub-Total Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
SUB-TOTAL Energy Efficiency Programs	\$3,807	\$185	\$101	\$162	\$17	\$162	\$1,776	\$1,265	\$138
RENEWABLE ENERGY PROGRAMS									
Customer Sited Clean Generation	\$2,133	\$52	\$12	\$31	\$5	\$31	\$2,000	\$2	\$0
BPU Grid-Supply/Market Development	\$527	\$0	\$0	\$0	\$0	\$0	\$527	\$0	\$0
Sub-Total Renewable Energy	\$2,660	\$52	\$12	\$31	\$5	\$31	\$2,527	\$2	\$0
Total Expenditures	\$6,467	\$237	\$113	\$193	\$22	\$193	\$4,303	\$1,267	\$138
							Direct Payments		
							\$5,570		

New Jersey Clean Energy Collaborative 2003 Budget

Company: NUI Elizabethtown

(All numbers = 000's)

	Total	Admin (Payroll, Overheads, facilities, legal, etc.)	Sales (Int or Contr)	Marketing & Promotions	Training	Market Research, Evaluation & Program Development	Direct Payments		Projected 2002 Performance Incentive
							Grants, Incentives, Arrears Reduction	Implemen. Contractors	
RESIDENTIAL ENERGY EFFICIENCY									
Residential HVAC - Electric	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Residential HVAC - Gas	\$654	\$35	\$26	\$136	\$30	\$20	\$272	\$100	\$35
Residential ENERGY STAR Products	\$79	\$4	\$3	\$12	\$2	\$7	\$24	\$25	\$2
Residential Low Income	\$901	\$36	\$9	\$41	\$9	\$16	\$50	\$699	\$41
NJ ENERGY STAR Homes	\$533	\$17	\$15	\$50	\$5	\$27	\$300	\$101	\$18
Residential Retrofit	\$7	\$1	\$0	\$0	\$0	\$0	\$0	\$6	\$0
Sub-Total Residential	\$2,174	\$93	\$53	\$239	\$46	\$70	\$646	\$931	\$96
NONRESIDENTIAL ENERGY EFFICIENCY									
Commercial/Industrial Construction	\$903	\$29	\$22	\$79	\$14	\$29	\$700	\$0	\$29
Building Operation & Maintenance	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sub-Total Nonresidential	\$903	\$29	\$22	\$79	\$14	\$29	\$700	\$0	\$29
OTHER PROGRAMS									
Appliance Cycling	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Schools EE&R Education	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sub-Total Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
SUB-TOTAL Energy Efficiency Programs	\$3,077	\$122	\$75	\$318	\$60	\$99	\$1,346	\$931	\$125
RENEWABLE ENERGY PROGRAMS									
Customer Sited Clean Generation	\$2,516	\$22	\$16	\$59	\$11	\$38	\$2,370	\$0	\$0
BPU Grid-Supply/Market Development	\$527	\$0	\$0	\$0	\$0	\$0	\$527	\$0	\$0
Sub-Total Renewable Energy	\$3,043	\$22	\$16	\$59	\$11	\$38	\$2,897	\$0	\$0
Total Expenditures	\$6,120	\$144	\$91	\$377	\$71	\$137	\$4,243	\$931	\$125
							Direct Payments		
							\$5,174		

New Jersey Clean Energy Collaborative 2003 Budget

Company: PSE&G Gas

(All numbers = 000's)

	Total	Admin (Payroll, Overheads, facilities, legal, etc.)	Sales (Int or Contr)	Marketing & Promotions	Training	Market Research, Evaluation & Program Development	Direct Payments		Projected 2002 Performance Incentive
							Grants, Incentives, Arrears Reduction	Implemen. Contractors	
RESIDENTIAL ENERGY EFFICIENCY									
Residential HVAC - Electric	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Residential HVAC - Gas	\$3,296	\$342	\$140	\$500	\$70	\$300	\$1,580	\$180	\$185
Residential ENERGY STAR Products	\$1,044	\$21	\$29	\$343	\$3	\$100	\$448	\$75	\$24
Residential Low Income	\$3,643	\$178	\$49	\$4	\$37	\$235	\$138	\$2,831	\$172
NJ ENERGY STAR Homes	\$3,787	\$159	\$255	\$450	\$40	\$134	\$1,650	\$939	\$160
Residential Retrofit	\$8	\$1	\$0	\$0	\$0	\$0	\$0	\$7	\$0
Sub-Total Residential	\$11,779	\$701	\$473	\$1,297	\$150	\$769	\$3,816	\$4,033	\$540
NONRESIDENTIAL ENERGY EFFICIENCY									
Commercial/Industrial Construction	\$1,568	\$49	\$82	\$150	\$15	\$118	\$1,070	\$0	\$85
Building Operation & Maintenance	\$5	\$0	\$0	\$0	\$0	\$0	\$0	\$5	\$0
Sub-Total Nonresidential	\$1,573	\$49	\$82	\$150	\$15	\$118	\$1,070	\$5	\$85
OTHER PROGRAMS									
Appliance Cycling	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Schools EE&R Education	\$82	\$2	\$0	\$0	\$0	\$0	\$0	\$80	\$0
Sub-Total Other	\$82	\$2	\$0	\$0	\$0	\$0	\$0	\$80	
SUB-TOTAL Energy Efficiency Programs	\$13,434	\$752	\$555	\$1,447	\$165	\$887	\$4,886	\$4,118	\$625
RENEWABLE ENERGY PROGRAMS									
Customer Sited Clean Generation	\$4,632	\$128	\$0	\$584	\$44	\$162	\$3,705	\$9	\$0
BPU Grid-Supply/Market Development	\$2,736	\$0	\$0	\$0	\$0	\$0	\$2,736	\$0	\$0
Sub-Total Renewable Energy	\$7,368	\$128	\$0	\$584	\$44	\$162	\$6,441	\$9	\$0
Total Expenditures	\$20,802	\$880	\$555	\$2,031	\$209	\$1,049	\$11,327	\$4,126	\$625
							Direct Payments		
							\$15,453		

New Jersey Clean Energy Collaborative 2003 Budget

Company: South Jersey Gas

(All numbers = 000's)

	Total	Admin (Payroll, Overheads, facilities, legal, etc.)	Sales (Int or Contr)	Marketing & Promotions	Training	Market Research, Evaluation & Program Development	Direct Payments		Projected 2002 Performance Incentive
							Grants, Incentives, Arrears Reduction	Implemen. Contractors	
RESIDENTIAL ENERGY EFFICIENCY									
Residential HVAC - Electric	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Residential HVAC - Gas	\$848	\$107	\$9	\$32	\$10	\$23	\$610	\$8	\$49
Residential ENERGY STAR Products	\$64	\$3	\$5	\$24	\$0	\$9	\$9	\$12	\$2
Residential Low Income	\$778	\$52	\$6	\$3	\$5	\$31	\$31	\$628	\$22
NJ ENERGY STAR Homes	\$697	\$41	\$20	\$15	\$6	\$15	\$314	\$266	\$20
Residential Retrofit	\$5	\$1	\$0	\$0	\$0	\$0	\$0	\$4	\$0
Sub-Total Residential	\$2,392	\$204	\$40	\$74	\$21	\$78	\$964	\$918	\$93
NONRESIDENTIAL ENERGY EFFICIENCY									
Commercial/Industrial Construction	\$573	\$40	\$30	\$21	\$5	\$22	\$436	\$0	\$19
Building Operation & Maintenance	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sub-Total Nonresidential	\$573	\$40	\$30	\$21	\$5	\$22	\$436	\$0	\$19
OTHER PROGRAMS									
Appliance Cycling	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Schools EE&R Education	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sub-Total Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
SUB-TOTAL Energy Efficiency Programs	\$2,966	\$244	\$70	\$95	\$26	\$100	\$1,400	\$918	\$112
RENEWABLE ENERGY PROGRAMS									
Customer Sited Clean Generation	\$924	\$10	\$4	\$7	\$5	\$24	\$869	\$5	\$0
BPU Grid-Supply/Market Development	\$439	\$0	\$0	\$0	\$0	\$0	\$439	\$0	\$0
Sub-Total Renewable Energy	\$1,363	\$10	\$4	\$7	\$5	\$24	\$1,308	\$5	\$0
Total Expenditures	\$4,329	\$254	\$74	\$102	\$31	\$124	\$2,708	\$923	\$112
							Direct Payments		
							\$3,631		

**New Jersey Clean Energy Collaborative
2003 Program Plan
Performance Incentives**

November 1, 2002

New Jersey Clean Energy Collaborative 2003 Program Plan
Detailed Performance Incentives - By Program and by Company

SCHEDULE 1: RESIDENTIAL ELECTRIC HVAC PERFORMANCE INCENTIVE METRICS FOR PROGRAM YEAR 2003										
	Statewide	PSEG - Electric	JCP&L	Conectiv	RECO	PSEG-Gas	Elizabeth- town Gas	S. Jersey Gas	NJ Natural Gas	
Maximum incentive total (\$000's)	\$ 974	\$ 500	\$ 347	\$ 118	\$ 9	\$ -	\$ -	\$ -	\$ -	\$ -
Performance targets										
Metric 1: Central AC or Heat Pumps Statewide - Exceed in 2003 by 5.5% the actual number of systems rebated statewide in 2002 (i.e., 110% of the 2003 goal)										
Metric 2: HVAC Technicians NATE certified in 2003	550									
Performance target incentive values (\$000s)										
Metric 1 80%	\$ 779	\$ 400	\$ 277	\$ 95	\$ 7	\$ -	\$ -	\$ -	\$ -	\$ -
Metric 2 20%	\$ 195	\$ 100	\$ 69	\$ 24	\$ 2	\$ -	\$ -	\$ -	\$ -	\$ -
Total 100%	\$ 974	\$ 500	\$ 347	\$ 118	\$ 9	\$ -	\$ -	\$ -	\$ -	\$ -

- NOTES:**
1. Performance targets are statewide numbers - either reached together or not reached together. There are no individual utility targets.
 2. To be eligible for any incentives, individual utilities must meet minimum requirements stated in the program summaries.
 3. Incentives shown for metrics are for 110% goal achievement. No incentives are offered for achieving 70% of the goal. Incentives increase linearly between 70% and 110% of the goal (e.g. 50% of incentives are achieved at 90% of the goal).
 4. MWh savings are computed according to the protocols filed July 9, 2001. MWh savings are at the generator (i.e. including reductions in line losses)

New Jersey Clean Energy Collaborative 2003 Program Plan
Detailed Performance Incentives - By Program and by Company

SCHEDULE 2: RESIDENTIAL GAS HVAC PERFORMANCE INCENTIVE METRICS FOR PROGRAM YEAR 2003											
		Statewide	PSEG - Electric	JCP&L	Conectiv	RECO	PSEG-Gas	Elizabeth- town Gas	S. Jersey Gas	NJ Natural Gas	
Maximum incentive total (\$000's)		\$ 391	\$ -	\$ -	\$ -	\$ -	\$ 226	\$ 48	\$ 55	\$ 61	
Performance targets											
Metric 1: Furnaces or Boilers Statewide - Exceed in 2003 by 7.7% the actual number of systems rebated statewide in 2002 (i.e., 110% of the 2003 program goal).											
Metric 2: HVAC Sales Reps Trained Statewide		165									
Performance target incentive values (\$000s)											
Metric 1	67%	\$ 262	\$ -	\$ -	\$ -	\$ -	\$ 152	\$ 32	\$ 37	\$ 41	
Metric 2	33%	\$ 129	\$ -	\$ -	\$ -	\$ -	\$ 75	\$ 16	\$ 18	\$ 20	
Total	100%	\$ 391	\$ -	\$ -	\$ -	\$ -	\$ 226	\$ 48	\$ 55	\$ 61	

- NOTES:**
1. Performance targets are statewide numbers - either reached together or not reached together. There are no individual utility targets.
 2. To be eligible for any incentives, individual utilities must meet minimum requirements stated in the program summaries.
 3. Incentives shown for metrics are for 110% goal achievement. No incentives are offered for achieving 70% of the goal.
Incentives increase linearly between 70% and 110% of the goal (e.g. 50% of incentives are achieved at 90% of the goal)

New Jersey Clean Energy Collaborative 2003 Program Plan
Detailed Performance Incentives - By Program and by Company

SCHEDULE 3: RESIDENTIAL ENERGY STAR PRODUCTS PERFORMANCE INCENTIVE METRICS FOR PROGRAM YEAR 2003											
		Statewide	PSEG - Electric	JCP&L	Conectiv	RECO	PSEG-Gas	Elizabeth- town Gas	S. Jersey Gas	NJ Natural Gas	
Maximum incentive total (\$000's)		\$ 372	\$ 178	\$ 83	\$ 16	\$ -	\$ 80	\$ 6	\$ 5	\$ 5	
Performance targets											
Metric 1:	Maintain retailer ENERGY STAR partner commitments. This includes placing marketing materials in the stores that promote ENERGY STAR products, training sales associates in the benefits of and how to sell ENERGY STAR products, and continuing to sponsor co-op advertising and product promotions that at least 15% of enlisted program retailers of each of the three product categories participate in by year-end.										
Metric 2:	Develop a broad-based consumer promotion designed to have the most benefit to NJ consumers with input from NJBPU, Ratepayer Advocate, and industry. The ENERGY STAR product(s) to be promoted (e.g. CFLs, clothes washers) will be selected in consultation with NJBPU, RPA, and industry experts										
Metric 3:	Complete all planned 2003 Evaluation activities identified in Evaluation Plan by revised dates. At minimum these will include the process evaluation and market progress reports that were started in March 2002 and placed on hold in July 2002 pending NJBPU review.										
Metric 4:	Develop and implement methodology for tracking market share of ENERGY STAR lighting, windows, and appliances sold to consumers in New Jersey.										
Performance target incentive values (\$000s)											
Metric 1	50%	\$ 186	\$ 89	\$ 41	\$ 8	\$ -	\$ 40	\$ 3	\$ 2	\$ 2	
Metric 2	15%	\$ 56	\$ 27	\$ 12	\$ 2	\$ -	\$ 12	\$ 1	\$ 1	\$ 1	
Metric 3	25%	\$ 93	\$ 44	\$ 21	\$ 4	\$ -	\$ 20	\$ 2	\$ 1	\$ 1	
Metric 4	10%	\$ 37	\$ 18	\$ 8	\$ 2	\$ -	\$ 8	\$ 1	\$ 0	\$ 0	
Total	100%	\$ 372	\$ 178	\$ 83	\$ 16	\$ -	\$ 80	\$ 6	\$ 5	\$ 5	

- NOTES:**
1. Performance targets are statewide numbers - either reached together or not reached together. There are no individual utility targets.
 2. To be eligible for any incentives, utilities must meet minimum requirements stated in the program summaries.
 3. Incentives shown for metrics are for 110% goal achievement. No incentives are offered for achieving 70% of the goal.
Incentives increase linearly between 70% and 110% of the goal (e.g. 50% of incentives are achieved at 90% of the goal)
 4. "Enlisted" retailers are those who have signed a Program participation agreement and agreed to the placement of Program marketing materials at the retailer point-of-sale.

New Jersey Clean Energy Collaborative 2003 Program Plan
Detailed Performance Incentives - By Program and by Company

SCHEDULE 4: RESIDENTIAL LOW INCOME PERFORMANCE INCENTIVE METRICS FOR PROGRAM YEAR 2003											
	Statewide	PSEG - Electric	JCP&L	Conectiv	RECO	PSEG-Gas	Elizabeth- town Gas	S. Jersey Gas	NJ Natural Gas		
Maximum incentive total (\$000's)	\$ 1,276	\$ 382	\$ 308	\$ 97	\$ 3	\$ 269	\$ 67	\$ 91	\$ 59		
Performance targets											
Metric 1:	1. Exceed program goals for the low income portion of the program by 10% on a statewide basis (I.e., low income enrollment and arrearag reductions goals).										
Performance target incentive values (\$000s)											
Metric 1	100%	\$ 1,276	\$ 382	\$ 308	\$ 97	\$ 3	\$ 269	\$ 67	\$ 91	\$ 59	

NOTES: 1. The metric is based on statewide numbers - it is either reached together or not reached together.

New Jersey Clean Energy Collaborative 2003 Program Plan
Detailed Performance Incentives - By Program and by Company

SCHEDULE 5: RESIDENTIAL NEW CONSTRUCTION INCENTIVE METRICS FOR PROGRAM YEAR 2003										
	Statewide	PSEG - Electric	JCP&L	Conectiv	RECO	PSEG-Gas	Elizabeth- town Gas	S. Jersey Gas	NJ Natural Gas	
Maximum incentive total (\$000's)	\$ 1,306	\$ 296	\$ 331	\$ 195	\$ 12	\$ 282	\$ 40	\$ 97	\$ 53	
Performance targets										
Market Share	22.0% of Residential New Construction Permits are committed to meeting program standards									
	or									
	6,095	MWh/yr	and	904,200	therms/yr	saved by completed homes (see Note 7).				
Performance target incentive values (\$000s)										
Metric 1 100%	\$ 1,306	\$ 296	\$ 331	\$ 195	\$ 12	\$ 282	\$ 40	\$ 97	\$ 53	

- NOTES:**
1. Target is based on share of actual residential permits issued per Dept. of Community Affairs.
 2. Performance targets are statewide numbers - either reached together or not reached together. There are no individual utility targets.
 3. To be eligible for any incentives, individual utilities must meet minimum requirements stated in the program summaries.
 4. Incentives shown for metrics are for 110% goal achievement. No incentives are offered for achieving 70% of the goal. Incentives increase linearly between 70% and 110% of the goal (e.g. 50% of incentives are achieved at 90% of the goal)
 5. Participants goals are based on the number of enrollees. There is often 6 to 12 month time-lag between when a participant is enrolled and the participant is finished with installation of efficiency measures. MWH and therm savings are for completed participants. Thus, it is not possible to estimate per participant savings by dividing savings goals by participant (enrollee) goals.
 6. MWh and therm savings are computed according to the protocols filed July 9, 2001. MWH savings are at the generator (i.e. including reductions in line losses)
 7. Savings targets in Metric 1 are based on 110% of 3,000 completion; 1,847 kWh/unit and 274 therms/unit.

New Jersey Clean Energy Collaborative 2003 Program Plan
Detailed Performance Incentives - By Program and by Company

SCHEDULE 6: COMMERCIAL ENERGY EFFICIENT CONSTRUCTION PERFORMANCE INCENTIVE METRICS FOR PROGRAM YEAR 2003										
	Statewide	PSEG - Electric	JCP&L	Conectiv	RECO	PSEG-Gas	Elizabeth- town Gas	S. Jersey Gas	NJ Natural Gas	
Maximum incentive total (\$000's)	\$2,635	\$ 1,152	\$ 896	\$ 303	\$ 20	\$ 114	\$ 68	\$ 38	\$ 43	
Performance targets										
Metric 1: Energy Savings										
- MWh savings =		104,396 MWh (10%>goal & 11% for T&D losses)								
- Therm savings =		418,273 therms (x 1.1 for perf metric>goal)								
Metric 2: Complete at least 2,092 total SMART START BUILDING projects (prescriptive, custom, comprehensive design) by 12/31/03										
Metric 3: Have committed at least 46 comprehensive design projects by 12/31/03										
Metric 4: Complete at least 202 multiple measure projects by 12/31/03										
Metric 5: Increase program performance of Unitary HVAC Tier II units to 457 units by 12/31/03										
Metric 6: Secure agreements with customers for 9 chiller optimization projects by 12/31/03										
Metric 7: Complete at least 13 lighting remodeling demonstration projects by 12/31/03										
Metric 8: Complete at least 9 compressed air projects by 12/31/03										
...										
Performance target incentive values (\$000s)										
Metric 1: 40% electrics, 64% RECO, 64% gas	\$ 1,054	\$ 461	\$ 359	\$ 121	\$ 8	\$ 46	\$ 27	\$ 15	\$ 17	
Metric 2: 12.0%	\$ 316	\$ 138	\$ 108	\$ 36	\$ 2	\$ 14	\$ 8	\$ 5	\$ 5	
Metric 3: 12.0%	\$ 316	\$ 138	\$ 108	\$ 36	\$ 2	\$ 14	\$ 8	\$ 5	\$ 5	
Metric 4: 12.0%	\$ 316	\$ 138	\$ 108	\$ 36	\$ 2	\$ 14	\$ 8	\$ 5	\$ 5	
Metric 5: 6% electrics only (minus RECO)	\$ 158	\$ 69	\$ 54	\$ 18	\$ 1	\$ 7	\$ 4	\$ 2	\$ 3	
Metric 6: 6% electrics only (minus RECO)	\$ 158	\$ 69	\$ 54	\$ 18	\$ 1	\$ 7	\$ 4	\$ 2	\$ 3	
Metric 7: 6% electrics only (minus RECO)	\$ 158	\$ 69	\$ 54	\$ 18	\$ 1	\$ 7	\$ 4	\$ 2	\$ 3	
Metric 8: 6% electrics only (minus RECO)	\$ 158	\$ 69	\$ 54	\$ 18	\$ 1	\$ 7	\$ 4	\$ 2	\$ 3	
Total 100%	\$ 2,635	\$ 1,152	\$ 896	\$ 303	\$ 20	\$ 114	\$ 68	\$ 38	\$ 43	
...										

- NOTES:**
1. Performance targets are statewide numbers - either reached together or not reached together. There are no individual utility targets.
 2. To be eligible for any incentives, utilities must meet minimum requirements stated in the program summaries.
 3. Incentives shown for metrics are for 110% goal achievement (or the Max # if shown).
 Incentives increase linearly between \$0 at 70% of goal, and the incentive shown for reaching 110% of goal (e.g. 50% of incentives are achieved at 90% of the goal).
 Where Min and Max values are shown, incentives increase linearly with achievements between the minimum and maximum values.